Vol. 130, No. 1 January 1973

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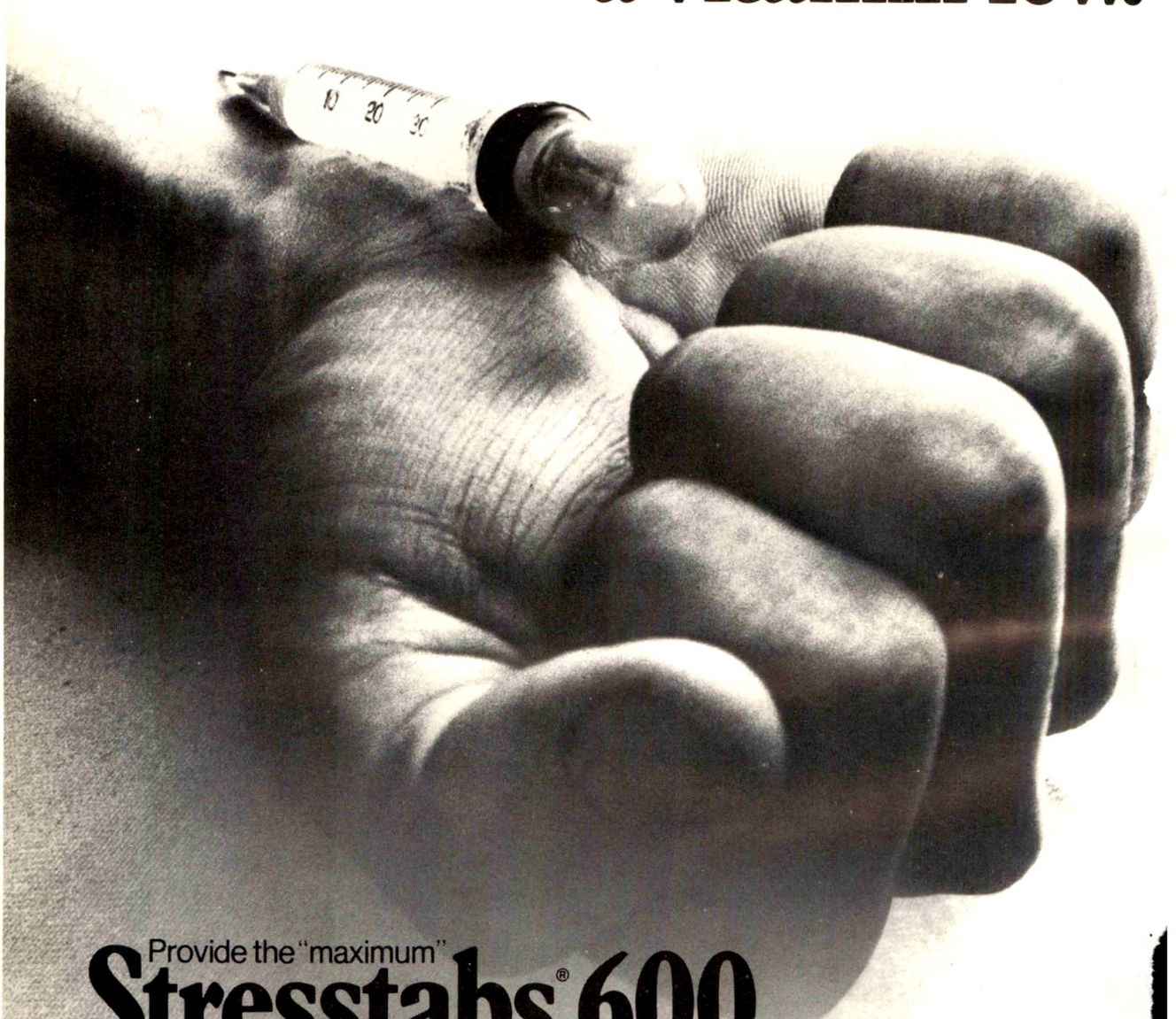
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The American Journal of Psychiatry, formerly *The American Journal of Insanity*, is published monthly by the American Psychiatric Association. Editorial office: 1700 Eighteenth Street, N.W., Washington, D.C. 20009; telephone (202) 232-7878.

Subscriptions: U.S. $15.00 per year, Canada and South America $15.75, other foreign $18.00; single issues: $1.75 plus postage.

APA members should direct changes of address and communications about nonreceipt of the *Journal* to the Manpower Division, American Psychiatric Association, 1700 Eighteenth Street, N.W., Washington, D.C. 20009.

Communications from nonmember subscribers and all business communications should be directed to Mr. Robert J. Lowe, Publications Services Division, at the same address.

Advertising representatives: Steven K. Herlitz, Inc., 850 Third Avenue, New York, N.Y. 10022.

Type set by Bru-El Graphic, Inc., 5265 Port Royal Road, Springfield, Va. 22151.

Printed by Dartmouth Printing Co., 69 Lyme Road, Hanover, N.H. 03755.

Second class postage paid at Washington, D.C., and additional mailing offices.

Indexed in *Abstracts for Social Workers, Biological Abstracts, Chemical Abstracts, Cumulative Index to Nursing Literature, Excerpta Medica, Hospital Literature Index, Index Medicus, International Nursing Index, Nutrition Abstracts*, and *Psychological Abstracts*.

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OFFICIAL JOURNAL OF THE
AMERICAN PSYCHIATRIC ASSOCIATION

The American Journal of Psychiatry, formerly *The American Journal of Insanity*, is published monthly by the American Psychiatric Association. Editorial office: 1700 Eighteenth Street, N.W., Washington, D.C. 20009; telephone (202) 232-7878.

Subscriptions: U.S. $15.00 per year, Canada and South America $15.75, other foreign $18.00; single issues: $1.75 plus postage.

APA members should direct changes of address and communications about nonreceipt of the *Journal* to the Manpower Division, American Psychiatric Association, 1700 Eighteenth Street, N.W., Washington, D.C. 20009.

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Advertising representatives: Steven K. Herlitz, Inc., 850 Third Avenue, New York, N.Y. 10022.

Printed by Dartmouth Printing Co., 69 Lyme Road, Hanover, N.H. 03755.

Second class postage paid at Washington, D.C., and additional mailing offices.

Indexed in *Abstracts for Social Workers, Biological Abstracts, Chemical Abstracts, Cumulative Index to Nursing Literature, Excerpta Medica, Hospital Literature Index, Index Medicus, International Nursing Index, Nutrition Abstracts,* and *Psychological Abstracts.*

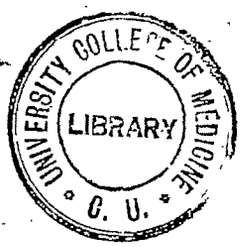
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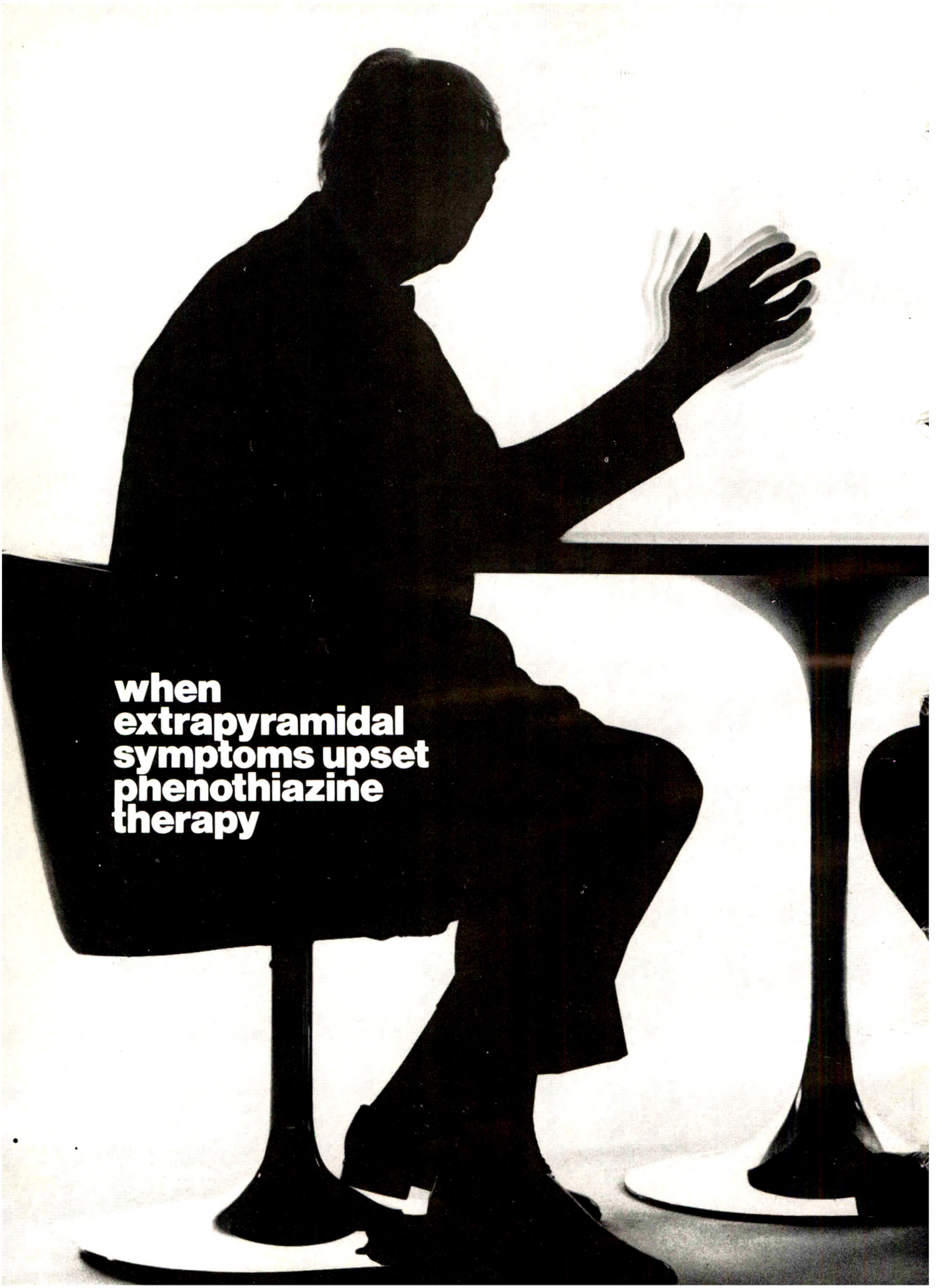
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May produce anhidrosis; give with caution during hot weather, especially to the old, the chronically ill, the alcoholic, those who have central nervous system disease, those who do manual labor in a hot environment, and those with disturbances in sweating. If anhidrosis appears, reduce dosage so that ability to maintain body heat equilibrium is not impaired. Occurrence of glaucoma is a possibility; probably should not be used in angle-closure glaucoma.

Large doses generally cannot be tolerated by older patients, thin patients, or patients with arteriosclerotic parkinsonism. Do not terminate other antiparkinsonism agents abruptly; reduce gradually. In drug-induced parkinsonism, closely observe patients for severe reactions, and temporarily discontinue COGENTIN (Benztropine Mesylate, MSD) if they appear; do not extend therapy longer than necessary to counteract the extrapyramidal disorders; although the psychotropic drug frequently can be continued without change of dosage, a decrease might be indicated.

Adverse Reactions: Adverse reactions may be anticholinergic and/or antihistaminic. Dry mouth, blurred vision, nausea, nervousness may develop. If dry mouth causes difficulty in swallowing or speaking, or loss of appetite and weight, reduce dosage, or discontinue drug temporarily. Vomiting occurs infrequently and may be controlled by temporary discontinuation, followed by resumption at a lower dosage. Constipation, numbness of the fingers, listlessness, and depression may develop. Occasionally, an allergic reaction, e.g., skin rash, develops; sometimes this can be controlled by reducing dosage, but occasionally requires discontinuation.

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Here's what a group of anxious psychoneurotics (most with associated depressive symptoms) looked like after Valium® (diazepam) and psychotherapy

Pretreatment evaluations were compared with those of the second and fourth week of treatment, yielding a cumulative "improvement" score for each patient, symptom and observation interval.† A global assessment of the patient's emotional status was also made at each rating period.

Psychiatric Evaluation on a Modified BPRS*	Average scores of 17 patients—out of initial group of 21 patients—in study for 26 or more days**				
	Not present	Very mild/ mild	Mod- erate	Moder- ately severe/ severe	Extremely severe
1. Somatic concern	1	2	3	4	5
2. Anxiety	1	2	3	4	5
3. Emotional withdrawal	1	2	3	4	5
4. Guilt feelings	1	2	3	4	5
5. Tension	1	2	3	4	5
6. Depressive mood	1	2	3	4	5
7. Hostility	1	2	3	4	5
8. Motor retardation	1	2	3	4	5
9. Blunted affect	1	2	3	4	5

†With the exception of excessive anxiety and undue tension, the signs and symptoms shown in the Modified BPRS are not in themselves indications for Valium.

Valium® (diazepam) Tablets
Complete Prescribing Information:

Description: Valium (diazepam) is a benzodiazepine derivative developed through original Roche research. Chemically, diazepam is 7-chloro-1,3-dihydro-1-methyl-5-phenyl-2H-1,4-benzodiazepin-2-one. It is a colorless, crystalline compound, insoluble in water and has a molecular weight of 284.74.

Pharmacology: In animals Valium (diazepam) appears to act on parts of the limbic system, the thalamus and hypothalamus, and induces calming effects. Valium (diazepam), unlike chlorpromazine and reserpine, has no demonstrable peripheral autonomic blocking action, nor does it produce extrapyramidal side effects; however, animals treated with Valium (diazepam) do have a transient ataxia at higher doses. Valium (diazepam) was found to have transient cardiovascular depressor effects in dogs. Long-term experiments in rats revealed no disturbances of endocrine function.

Oral LD_{50} of diazepam is 720 mg/kg in mice and 1240 mg/kg in rats. Intraperitoneal administration of 400 mg/kg to a monkey resulted in death on the sixth day.

Reproduction Studies: A series of rat reproduction studies was performed with diazepam in oral doses of 1, 10, 80 and 100 mg/kg. At 100 mg/kg there was a decrease in the number of pregnancies and surviving offspring in these rats. Neonatal survival of rats at doses lower than 100 mg/kg was within normal limits. Several neonates in these rat-reproduction studies showed skeletal or other defects. Further studies in rats at doses up to and including 80 mg/kg/day did not reveal teratological effects on the offspring.

In humans, measurable blood levels of Valium (diazepam) were obtained in maternal and cord blood, indicating placental transfer of the drug.

Indications: Valium (diazepam) is useful in the symptomatic relief of tension and anxiety states resulting from stressful circumstances or whenever somatic complaints are concomitants of emotional factors. It is useful in psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation.

In acute alcohol withdrawal, Valium (diazepam) may be useful in the symptomatic relief of acute agitation, tremor, impending or acute delirium tremens and hallucinosis.

Valium (diazepam) is a useful adjunct for the relief of skeletal muscle spasm due to reflex spasm to local pathology (such as inflammation of the muscles or joints, or secondary to trauma); spasticity caused by upper motor neuron disorders (such as cerebral palsy and paraplegia); athetosis; and stiff-man syndrome.

Oral Valium (diazepam) may be used adjunctively in convulsive disorders, although it has not proved useful as the sole therapy.

Contraindications: Valium (diazepam) is contraindicated in patients with a known hypersensitivity to this drug and, because of lack of sufficient clinical experience, in children under 6 months of age. It may be used in patients with open angle glaucoma who are receiving appropriate therapy, but it is contraindicated in acute narrow angle glaucoma.

Warnings: Valium (diazepam) is not of value in the treatment of psychotic patients and should not be employed in lieu of appropriate treatment. As is true of most preparations containing CNS-acting drugs, patients receiving Valium (diazepam) should be cautioned against engaging in hazardous occupations requiring complete mental alertness such as operating machinery or driving a motor vehicle.

As with other agents which have anticonvulsant activity, when Valium (diazepam) is used as an adjunct in treating convulsive disorders, the possibility of an increase in the frequency and/or severity of grand mal seizures may require an increase in the dosage of standard anticonvulsant medication. Abrupt withdrawal of Valium (diazepam) in such cases may also be associated with a temporary increase in the frequency and/or severity of seizures.

Since Valium (diazepam) has a central nervous system depressant effect, patients should be advised against the simultaneous ingestion of alcohol and other CNS-depressant drugs during Valium (diazepam) therapy.

Physical and Psychological Dependence: Withdrawal symptoms (similar in character to those noted with barbiturates and alcohol) have occurred following abrupt discontinuance of diazepam (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). These were usually limited to those patients who had received excessive doses over an extended period of time. Particularly addiction-prone individuals (such as drug addicts or alcoholics) should be under careful surveillance when receiving diazepam or other psychotropic agents because of the predisposition of such patients to habituation and dependence.

Use in Pregnancy: Use of any drug in pregnancy, lactation or in women of childbearing age requires that the potential benefit of the drug be weighed against its possible hazard to mother and child. (See *Reproduction Studies.*)

Management of Overdosage: Manifestations of Valium (diazepam) overdosage include somnolence, confusion, coma and diminished reflexes. Respiration, pulse and blood pressure should be monitored, as in all cases of drug overdosage, although, in general, these effects have been minimal following overdosage. General supportive measures should be employed, along with immediate gastric lavage. Intravenous fluids should be administered and an adequate airway maintained. Hypotension may be combated by the use of Levophed® (levarterenol) or Aramine (metaraminol). Ritalin (methylphenidate) or caffeine and sodium benzoate may be given to combat CNS-depressive effects. Dialysis is of limited value. As with the management of intentional overdosage with any drug, it should be borne in mind that multiple agents may have been ingested.

Precautions: If Valium (diazepam) is to be combined with other psychotropic agents or anticonvulsant drugs, careful consideration should be given to the pharmacology of the agents to be employed —particularly with known compounds which may potentiate the action of Valium (diazepam), such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants. The usual precautions are indicated for severely depressed patients or those in whom there is any evidence of latent depression; particularly the recognition that suicidal tendencies may be present and protective measures may be necessary. The usual precautions in treating patients with impaired renal or hepatic function should be observed.

In elderly and debilitated patients, it is recommended that the dosage be limited to the smallest effective amount to preclude the development of ataxia or oversedation (2 mg to 2½ mg once or twice daily, initially, to be increased gradually as needed and tolerated).

Adverse Reactions: Side effects most commonly reported were drowsiness, fatigue and ataxia. Infrequently encountered were confusion, constipation, depression, diplopia, dysarthria, headache, hypotension, incontinence, jaundice, changes in libido, nausea, changes in salivation, skin rash, slurred speech, tremor, urinary retention, vertigo and blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances and stimulation have been reported; should these occur, use of the drug should be discontinued.

Because of isolated reports of neutropenia and jaundice, periodic blood counts and liver function tests are advisable during long-term therapy. Minor changes in EEG patterns, usually low-voltage fast activity, have been observed in patients during and after Valium (diazepam) therapy and are of no known significance.

Dosage and Administration: Dosage should be individualized for maximum beneficial effect. While the usual daily dosages given below will meet the needs of most patients, there will be some who may require higher doses. In such cases dosage should be increased cautiously to avoid adverse effects.

Adults:	*USUAL DAILY DOSE*
Symptomatic Relief of Tension and Anxiety States and Psychoneurotic States.	Depending upon severity of symptoms—2 mg to 10 mg, 2 to 4 times daily
Symptomatic Relief in Acute Alcohol Withdrawal.	10 mg, 3 or 4 times during the first 24 hours, reducing to 5 mg, 3 or 4 times daily as needed
Adjunctively for Relief of Skeletal Muscle Spasm.	2 mg to 10 mg, 3 or 4 times daily
Adjunctively in Convulsive Disorders.	2 mg to 10 mg, 2 to 4 times daily
Geriatric Patients, or in the presence of debilitating disease.	2 mg to 2½ mg, 1 or 2 times daily initially; increase gradually as needed and tolerated
Children:	
Because of varied responses to CNS-acting drugs, initiate therapy with lowest dose and increase as required. Not for use in children under 6 months.	1 mg to 2½ mg, 3 or 4 times daily initially; increase gradually as needed and tolerated

How Supplied: For oral administration: Valium (diazepam) scored tablets—2 mg, white; 5 mg, yellow; and 10 mg, blue—bottles of 100 and 500. All strengths also available in Tel-E-Dose® packages of 1000.

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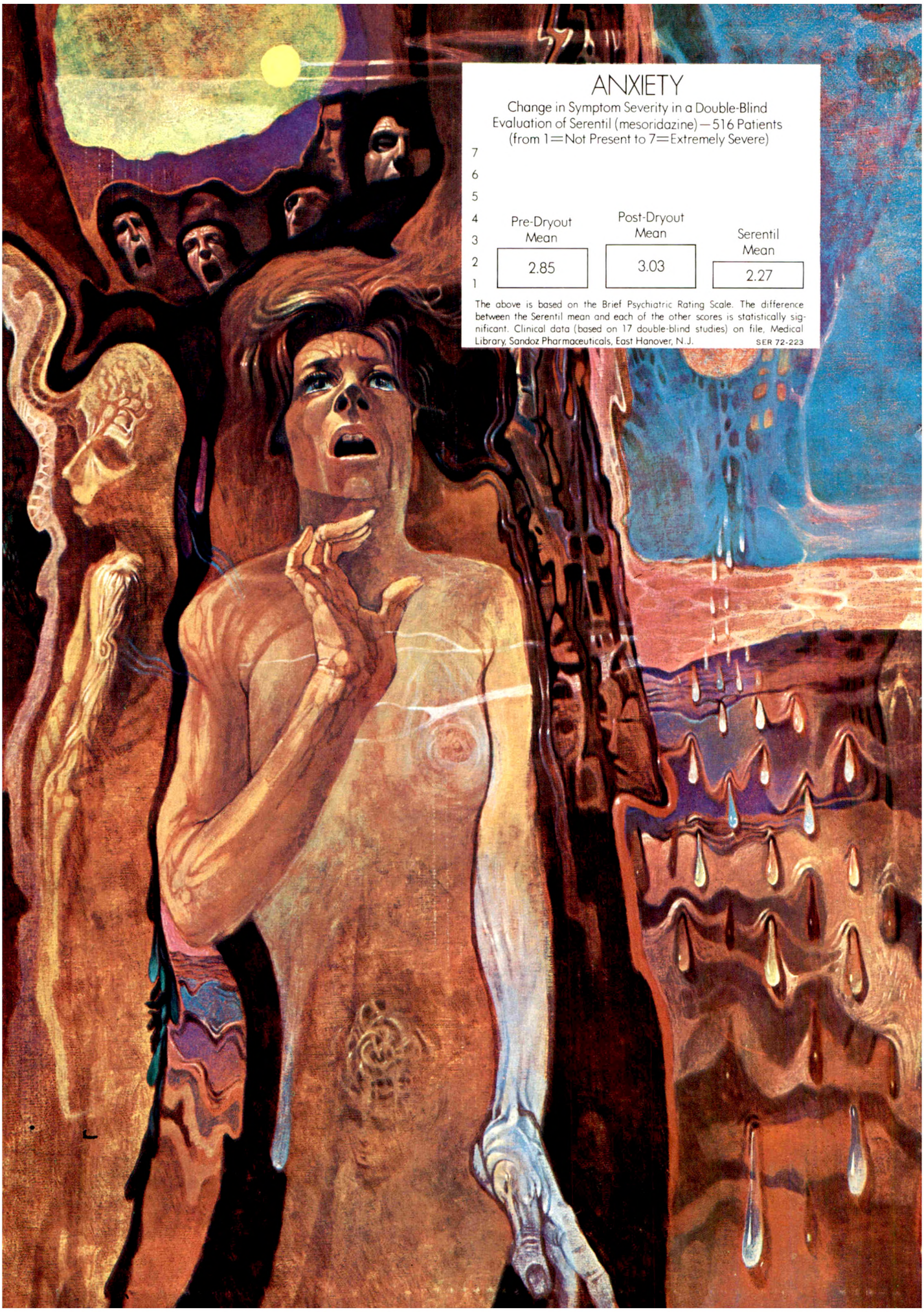
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TENSION / HALLUCINATORY BEHAVIOR
SUSPICIOUSNESS / BLUNTED AFFECT

One or more of these symptoms in a schizophrenic is an indication for



Contraindications: Severe central nervous system depression, comatose states, hypersensitivity.

Warnings: Increase dosage gradually to patients participating in activities requiring complete mental alertness (e.g., driving). The safety of this drug in pregnancy has not been established; hence, it should be given only when the anticipated benefits to be derived from treatment exceed the possible risks to mother and fetus. Use in children under 12 is not recommended. Phenothiazines are capable of potentiating central nervous system depressants as well as atropine and phosphorus insecticides.

Precautions: Ocular changes (seen with other phenothiazines) have not been seen with Serentil (mesoridazine). Because of possible hypotensive reactions, caution in parenteral use is required. Reserve parenteral administration for bedfast patients or for acute ambulatory cases, and keep patient lying down for at least ½ hour after injection. Leukopenia and/or agranulocytosis have been attributed to phenothiazine therapy. Blood dyscrasia (seen with other phenothiazines) has occurred in a single case of transient granulocytopenia.

Adverse Reactions: Serentil (mesoridazine) has demonstrated a remarkably low incidence of adverse reactions when compared with other phenothiazine compounds. *Central Nervous System:* Drowsiness, Parkinson's syndrome, dizziness, weakness, tremor, restlessness, ataxia, dystonia, rigidity, slurring, akathisia, motoric reactions (opisthotonos). *Autonomic Nervous System:* Dry mouth, nausea and vomiting, fainting, stuffy nose, photophobia, constipation and blurred vision. *Endocrine System:* Inhibition of ejaculation and lactation have been noted rarely. *Skin:* Itching, rash, hypertrophic papillae of the tongue and angioneurotic edema. *Cardiovascular System:* Hypotension, tachycardia, EKG changes.

The following reactions have occurred with phenothiazines and should be considered: *Autonomic Reactions*—Miosis, obstipation, anorexia, paralytic ileus. *Cutaneous Reactions*—Erythema, exfoliative dermatitis, contact dermatitis. *Blood Dyscrasias*—Agranulocytosis, leukopenia, eosinophilia, thrombocytopenia, anemia, aplastic anemia, pancytopenia. *Allergic Reactions*—Fever, laryngeal edema, angioneurotic edema, asthma. *Hepatotoxicity*—Jaundice, biliary stasis. *Cardiovascular Effects*—Changes in terminal portion of electrocardiogram, including prolongation of Q-T interval, lowering and inversion of T-wave, and appearance of a wave tentatively identified as a bifid T or a U wave have been observed with phenothiazines, including Serentil (mesoridazine); these appear to be reversible and due to altered repolarization, not myocardial damage. There is no evidence that these changes are precursors of any significant disturbance of cardiac rhythm. Hypotension, rarely resulting in cardiac arrest. *Extrapyramidal Symptoms*—Akathisia, agitation, motor restlessness, dystonic reactions, trismus, torticollis, opisthotonos, oculogyric crises, tremor, muscular rigidity, and akinesia, occasionally persisting for several months or years especially in elderly patients with brain damage. *Endocrine Disturbances*—Menstrual irregularities, altered libido, gynecomastia, weight gain, false positive pregnancy tests. *Urinary Disturbances*—Retention, incontinence. *Others*—Hyperpyrexia, behavioral effects suggestive of a paradoxical reaction, including excitement, bizarre dreams, aggravation of psychoses, and toxic confusional states; following long-term treatment, a peculiar skin-eye syndrome marked by progressive pigmentation of skin or conjunctiva and/or accompanied by discoloration of exposed sclera and cornea; stellate or irregular opacities of anterior lens and cornea.

Dosage and Administration: ORAL: Should be adjusted to needs of the individual. Lowest effective dosage should always be used. When maximum response is achieved, dosage may be reduced gradually to maintenance level. *Schizophrenia:* For most patients, regardless of severity, starting dose of 50 mg. t.i.d. recommended. Usual optimum total daily dose range 100-400 mg. *Behavioral Problems in Mental Deficiency and Chronic Brain Syndrome:* For most patients starting dose of 25 mg. t.i.d. recommended. Usual optimum total daily dose range 75-300 mg. *Alcoholism:* For most patients usual starting dose is 25 mg. b.i.d. Usual optimum total daily dose range 50-200 mg. *Psychoneurotic Manifestations:* For most patients usual starting dose is 10 mg. t.i.d. Usual optimum total daily dose range 30-150 mg. INJECTABLE FORM: For situations in which an intramuscular form of medication is indicated. For most patients a starting dose of 25 mg. is recommended, to be repeated in 30-60 minutes if necessary. Usual optimum total daily dose range 25-200 mg.

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Contraindications: History of previous hypersensitivity to oxazepam. Oxazepam is not indicated in psychoses.

Warning: *Use in Pregnancy:* Safety for use in pregnancy not established.

Precautions: Hypotensive reactions are rare, but use with caution where complications could ensue from a fall in blood pressure, especially in the elderly. Withdrawal symptoms upon discontinuation have been noted in some patients exhibiting drug dependence through chronic overdose. Carefully supervise dose and amounts prescribed, especially for patients prone to self-overdose; excessive, prolonged use in susceptible patients (alcoholics, ex-addicts, etc.) may result in dependence or habituation. Reduce dosage gradually after prolonged excessive dosage to avoid possible epileptiform seizures. Withdrawal symptoms following abrupt discontinuance are similar to those seen with barbiturates. Caution patients against driving or operating machinery until absence of drowsiness or dizziness is ascertained. Warn patients of possible reduction in alcohol tolerance.

Not indicated in children under 6 years; absolute dosage for 6- to 12-year-olds not established.

Adverse Reactions: Therapy-interrupting side effects are rare. Transient mild drowsiness is common initially; if persistent, reduce dosage. Dizziness, vertigo and headache have also occurred infrequently; syncope, rarely. Mild paradoxical reactions (excitement, stimulation of affect) are reported in psychiatric patients. Minor diffuse rashes (morbilliform, urticarial and maculopapular) are rare. Nausea, lethargy, edema, slurred speech, tremor and altered libido are rare and generally controllable by dosage reduction. Although rare, leukopenia and hepatic dysfunction including jaundice have been reported during therapy. Periodic blood counts and liver function tests are advised. Ataxia, reported rarely, does not appear related to dose or age. These side reactions, noted with related compounds, are not yet reported: paradoxical excitation with severe rage reactions, hallucinations, menstrual irregularities, change in EEG pattern, blood dyscrasias (including agranulocytosis), blurred vision, diplopia, incontinence, stupor, disorientation, fever and euphoria.

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thinks she has a "nervous stomach"

said she was tired and listless most of the time



Clinically significant anxiety may manifest itself by a variety of signs and symptoms, all of which are more readily apparent than those of depression. As a result, the coexisting depression that so frequently exists is often overlooked.

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WARNINGS: TRIAVIL should not be given with guanethidine or similarly acting compounds. Use cautiously in patients with history of urinary retention, narrow-angle glaucoma, increased ocular pressure, or convulsive disorders. Patients with cardiovascular disorders should be watched closely. Tricyclic antidepressants, including amitriptyline HCl, particularly in high doses, have been reported to produce arrhythmias, sinus tachycardia, and prolongation of conduction time. Myocardial infarction and stroke have been reported with tricyclic antidepressant drugs. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. Caution patients performing hazardous tasks, such as operating machinery or driving motor vehicles, that drug may impair mental and/or physical abilities.

PRECAUTIONS: Suicide is a possibility in depressed patients and may remain until significant remission occurs. Such patients should not have access to large quantities of this drug.

Perphenazine: Should not be used indiscriminately. Use with caution in patients who have previously exhibited severe adverse reactions to other phenothiazines. Likelihood of untoward actions is greater with high doses. Closely supervise with any dosage.
The antiemetic effect of perphenazine may obscure signs of toxicity due to overdosage of other drugs or make more difficult the diagnosis of disorders such as brain tumor or intestinal obstruction.
A significant, not otherwise explained, rise in body temperature may suggest individual intolerance to perphenazine, in which case discontinue.
If hypotension develops, epinephrine should not be employed, as its action is blocked and partially reversed by perphenazine.
Phenothiazines may potentiate the action of central nervous system depressants (opiates, analgesics, antihistamines, barbiturates, alcohol) and atropine. In concurrent therapy with any of these, TRIAVIL should be given in reduced dosage. May also potentiate the action of heat and phosphorous insecticides.

Amitriptyline: In manic-depressive psychosis, depressed patients may experience a shift toward the manic phase if they are treated with an antidepressant drug. Patients with paranoid symptomatology may have an exaggeration of such symptoms. The tranquilizing effect of TRIAVIL has seemed to reduce the likelihood of this effect.
Supervise closely and carefully adjust dosage when given with anticholinergic agents and sympathomimetic drugs.
The drug may enhance the response to alcohol and the effects of barbiturates and other CNS depressants.
Concurrent administration of amitriptyline HCl and electroshock therapy may increase the hazards of therapy. Such treatment should be limited to patients for whom it is essential.
Discontinue several days before elective surgery if possible. Elevation and lowering of blood-sugar levels have both been reported.

ADVERSE REACTIONS: Similar to those reported with either constituent alone.

Perphenazine: Side effects may be any of those reported with phenothiazine drugs: extrapyramidal symptoms (opisthotonos, oculogyric crises, hyperreflexia, dystonia, akathisia, dyskinesia, parkinsonism) usually controlled by the concomitant use of effective antiparkinsonian drugs and/or by reduction in dosage, but sometimes persist after discontinuation of the phenothiazine; skin disorders (photosensitivity, itching, erythema, urticaria, eczema, up to exfoliative dermatitis); other allergic reactions (asthma, laryngeal edema, angioneurotic edema, anaphylactoid reaction); peripheral edema; reversed epinephrine effect; hyperglycemia; endocrine disturbances (lactation, galactorrhea, disturbances of menstrual cycle); altered cerebrospinal fluid proteins; paradoxical excitement; ECG abnormalities (quinidine-like effect); reactivation of psychotic processes; catatonic-like states; autonomic reactions, such as dryness of the mouth, headache, nausea, vomiting, constipation, obstipation, urinary frequency, blurred vision, nasal congestion, and a change in pulse rate; hypnotic effects; pigmentary retinopathy; corneal and lenticular pigmentation; occasional lassitude; muscle weakness; mild insomnia. Other adverse reactions reported with various phenothiazine compounds include blood dyscrasias (pancytopenia, thrombocytopenic purpura, leukopenia, agranulocytosis, eosinophilia); liver damage (jaundice, biliary stasis); grand mal convulsions; cerebral edema; polyphagia; photophobia; skin pigmentation; and failure of ejaculation.

Amitriptyline: Note: Listing includes a few reactions not reported for this drug, but which have occurred with other pharmacologically similar tricyclic antidepressant drugs. *Cardiovascular:* Hypotension; hypertension; tachycardia; palpitation; myocardial infarction; arrhythmias; heart block; stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus. *Anticholinergic:* Dry mouth; blurred vision; disturbance of accommodation; constipation; paralytic ileus; urinary retention; dilatation of urinary tract. *Allergic:* Skin rash; urticaria; photosensitivity; edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis; eosinophilia; purpura; thrombocytopenia. *Gastrointestinal:* Nausea; epigastric distress; vomiting; anorexia; stomatitis; peculiar taste; diarrhea; parotid swelling; black tongue. *Endocrine:* Testicular swelling and gynecomastia in the male; breast enlargement and galactorrhea in the female; increased or decreased libido; elevated or lowered blood-sugar levels. *Other:* Dizziness; weakness; fatigue; headache; weight gain or loss; increased perspiration; urinary frequency; mydriasis; drowsiness; jaundice; alopecia. *Withdrawal Symptoms:* Abrupt cessation after prolonged administration may produce nausea, headache, and malaise. These are not indicative of addiction.

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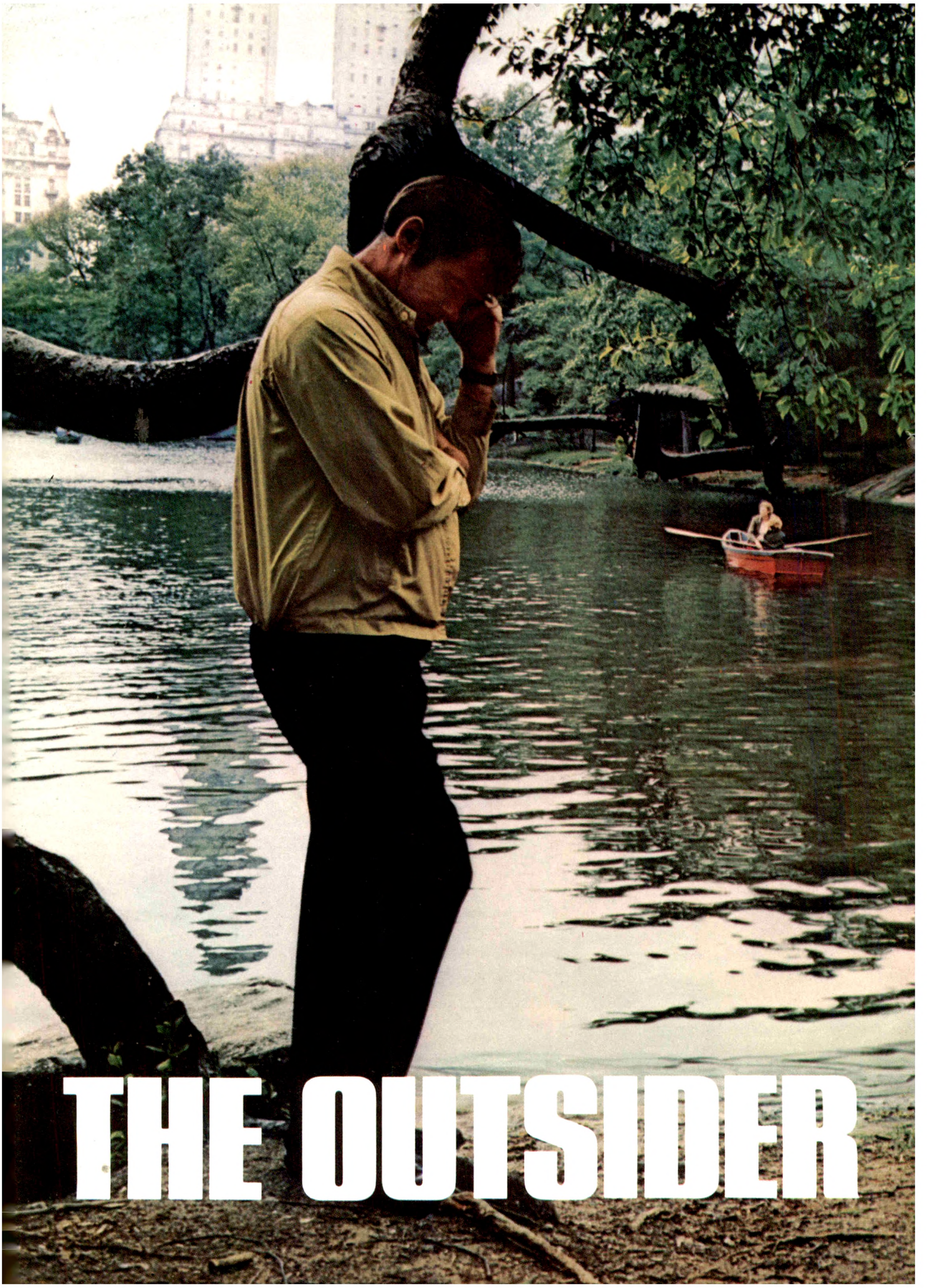
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THE OUTSIDER



The newly discharged mental hospital patient—outside the protective hospital environment, and facing a world filled with uncertainties

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Before prescribing or administering, see Sandoz literature for full product information. The following is a brief summary.

Contraindications: Severe central nervous system depression, comatose states from any cause, hypertensive or hypotensive heart disease of extreme degree.

Warnings: Administer cautiously to patients who have previously exhibited a hypersensitivity reaction (e.g., blood dyscrasias, jaundice) to phenothiazines. Phenothiazines are capable of potentiating central nervous system depressants (e.g., anesthetics, opiates, alcohol, etc.) as well as atropine and phosphorus insecticides. During pregnancy, administer only when the potential benefits exceed the possible risks to mother and fetus.

Precautions: There have been infrequent reports of leukopenia and/or agranulocytosis and convulsive seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmentary retinopathy may be avoided by remaining within the recommended limits of dosage. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., driving), and increase dosage gradually. Orthostatic hypotension is more common in females than in males. Do not use epinephrine in treating drug-induced hypotension since phenothiazines may induce a reversed epinephrine effect on occasion. Daily doses in excess of 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: *Central Nervous System*—Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. *Autonomic Nervous System*—Dryness of mouth, blurred vision, constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. *Endocrine System*—Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. *Skin*—Dermatitis and skin eruptions of the urticarial type, photosensitivity. *Cardiovascular System*—ECG changes (see *Cardiovascular Effects* below). *Other*—A single case described as parotid swelling.

The following reactions have occurred with phenothiazines and should be considered: *Autonomic Reactions*—Miosis, obstipation, anorexia, paralytic ileus. *CutaneousReactions*—Erythema, exfoliative dermatitis, contact dermatitis. *Blood Dyscrasias*—Agranulocytosis, leukopenia, eosinophilia, thrombocytopenia, anemia, aplastic anemia, pancytopenia. *Allergic Reactions*—Fever, laryngeal edema, angioneurotic edema, asthma. *Hepatotoxicity*—Jaundice, biliary stasis. *Cardiovascular Effects*—Changes in terminal portion of electrocardiogram, including prolongation of Q-T interval, lowering and inversion of T-wave, and appearance of a wave tentatively identified as a bifid T or a U wave have been observed with phenothiazines, including Mellaril (thioridazine); these appear to be reversible and due to altered repolarization, not myocardial damage. While there is no evidence of a causal relationship between these changes and significant disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients showing characteristic electrocardiographic changes while taking the drug. While proposed, periodic electrocardiograms are not regarded as predictive. Hypotension, rarely resulting in cardiac arrest. *Extrapyramidal Symptoms*—Akathisia, agitation, motor restlessness, dystonic reactions, trismus, torticollis, opisthotonus, oculogyric crises, tremor, muscular rigidity, and akinesia, occasionally persisting for several months or years especially in elderly patients with brain damage. *Endocrine Disturbances*—Menstrual irregularities, altered libido, gynecomastia, weight gain, false positive pregnancy tests. *Urinary Disturbances*—Retention, incontinence. *Others*—Hyperpyrexia; behavioral effects suggestive of a paradoxical reaction, including excitement, bizarre dreams, aggravation of psychoses, and toxic confusional states; following long-term treatment, a peculiar skin-eye syndrome marked by progressive pigmentation of skin or conjunctiva and/or accompanied by discoloration of exposed sclera and cornea; stellate or irregular opacities of anterior lens and cornea.

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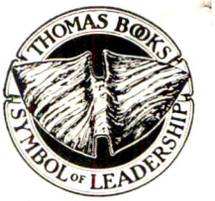
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THE AMERICAN JOURNAL OF PSYCHIATRY

The Behavior of Chimpanzees in Their Natural Habitat

BY JANE VAN LAWICK-GOODALL, PH.D.

In his search for the biological basis of human behavior patterns, the scientist finds a fruitful resource in studying the chimpanzee, man's closest living relative. The author describes some of the findings from a longitudinal study of chimpanzees at Gombe, Tanzania; these concern the long period of infant and juvenile dependence on the mother, the affectionate bonds in the chimpanzee family, adolescence, and dominance. She also discusses some of the behavior patterns of chimpanzees that strikingly resemble some patterns in man, noting, however, that there are also important differences that point up the uniqueness of the human.

IN 1960, AT THE INSTIGATION of the late Dr. L.S.B. Leakey, I began a longitudinal study of free-living chimpanzees (*Pan troglodytes schweinfurthi*) in the Gombe National Park, Tanzania, East Africa. This park comprises a narrow stretch of rugged, mountainous country running for some ten miles along the eastern shores of Lake Tanganyika and inland three miles or less to the tops of the peaks of the rift escarpment. The rift is intersected by many steep-sided valleys, which support permanent streams. In the valleys, riverine gallery forest is found; between the valleys the slopes are often more open, supporting deciduous woodland. Many of the higher ridges and peaks are covered only with grass. The area supports a population of between 100 and 150 chimpanzees.

This chimpanzee population is divided into communities of individuals who recognize and may interact with each other. Within such a community, which may include up to 50 or so individuals, chimpanzees mostly move about in small temporary associations, the membership of which is constantly changing as individuals or groups of individuals split off to move about alone or to join other associations. These groups may be all males, they may be females and youngsters, or they may be combinations of different age-sex classes. Chimpanzees, especially males, often move about quite on their own.

Some individuals in the community meet only when attractions, such as a local abundance of food or a female in oestrus, happen to draw them together; others meet more often; and some show strong bonds of mutual attraction and associate very frequently—traveling, grooming, feeding, and resting together. A mother and her dependent offspring is the one association that may remain stable over a period of years, though such a family unit frequently moves about with other associations.

In the wild, chimpanzees probably always live in male-dominated societies. Individuals of a community who frequently associate show a fairly well-defined dominance hierarchy, while among chimpanzees who meet only seldom the relative social status may be less clear-cut. As yet there is little information on relationships between individuals of different communities, but we do know that at least some chimpanzees may penetrate the home range of a neighboring community and peacefully travel, feed, or mate with its members.

Chimpanzees are promiscuous in that a female, during oestrus, may be mated by many males and no stable pair-bonds are formed. However, young females in particular may move with the same adult male (sometimes possibly copulating exclusively with him) during successive periods of oestrus (1).

Chimpanzees are omnivorous, feeding mainly on a variety of plant materials, especially fruits, but also consuming many insects, occasional bird's eggs or fledglings, and sometimes actively hunting and killing medium-sized mammals.

These apes follow no set route, day after day, in their search for food. Within a fairly large home range (which may be 20 square miles or more) they are nomadic, sleeping close to where dusk finds them. They typically move on the ground when traveling, although they do spend a good deal of time in the trees both during feeding and at night. They construct quite elaborate nests for sleeping: each individual typically makes a new nest every night, except for youngsters of up to five or six years (sometimes older), who share one with their mothers.

This is an edited version of the Adolf Meyer Lecture, read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

Dr. Van Lawick-Goodall is Scientific Director, Gombe Stream Research Center, Tanzania, East Africa, and Visiting Professor, Department of Psychiatry and Program in Human Biology, Stanford University Medical Center, Stanford, Calif. 94305.

In the wild, a female chimpanzee does not give birth until she is at least 12 or 13 years old, and she has only one infant every four or five years. Life expectancy in the wild is not yet known but is probably between 40 and 50 years. The longevity record for a captive chimpanzee is about 47 years.

From 1963 onward, observations of social interactions between the different individuals of the nomadic community were considerably facilitated by the establishment of an artificial feeding area where bananas were offered to chimpanzees passing by. This attraction of the chimpanzees to a specific area has enabled detailed longitudinal records on the behavior of approximately 70 different individuals of both sexes and all ages. Since 1965, a growing team of investigators has been contributing to the understanding of the behavior of the Gombe Stream chimpanzees. Hugo van Lawick has built up a unique documentary film and still-photograph record of their behavior.

The need for a study extending over a great many years is due not only to the fact that the chimpanzee has a long life expectancy, or that there is a fairly high mortality rate (due mainly to disease and injury), but also to the fact that these apes are highly individualistic, differing markedly from one another in behavior as well as appearance. Thus a great many individuals must be studied in depth, through as much of their life cycles as possible, before one can make meaningful generalized statements about chimpanzee behavior. The understanding of individual differences is, in fact, one of the principal aspects of our research.

SIGNIFICANCE OF CHIMPANZEE RESEARCH FOR UNDERSTANDING HUMAN BEHAVIOR

The chimpanzee is man's closest living relative. Recent biochemical research has already revealed striking similarities in, for example, the number and form of the chromosomes, the blood proteins, immune responses, and DNA (2, 3). Neuroanatomical research has shown that the structure and circuitry of the chimpanzee brain is closer to that of the human brain than is that of any other living primate. Behavioral research, in the field and in the laboratory, has highlighted remarkable similarities in this sphere also. Taken together, these findings suggest that, at some point in the distant past, man and chimpanzee shared a common ancestor. If this is true, we may assume that characteristics shared by modern man and modern chimpanzee were present in our stone-age ancestors.

Field studies provide information on the ways in which the structure and behavior of the species in question are adapted to its environment. Thus, since the chimpanzee is man's closest relative, and since he lives in an environment similar to that in which early man is thought to have emerged, an understanding of his behavior may well shed new light on the behavior of early man. This is of utmost significance to those concerned with human evolution—those who are trying to understand how and why man has become what he is today. As Hamburg (4) has pointed out, some aspects of our behavior today—for example, our tendency toward violent action—seem unsuitable for the world in which we now live. Such tendencies, however, were undoubtedly shaped, over millions of years, to ensure the survival of our ancestors in a very different kind of world—a world that was in all probability far more like the world of the chimpanzee. We desperately need a greater understanding of aggression in man, and an appreciation of its evolutionary history and significance would be quite helpful.

Laboratory studies of the chimpanzee, under controlled conditions, can be very meaningful in understanding some aspects of human behavior. This ape is the best experimental model for those investigating human mental disorders. It is possible, for instance, to create in a chimpanzee a condition resembling human psychosis or one closely similar to some human depressions (5). But in order to work in a meaningful way toward a cure for the depressed or psychotic chimpanzee subject, it is essential to have access to a wealth of background knowledge concerning the normal behavior of the species and the conditions under which abnormal behavior is likely to develop.

Finally, increasing scrutiny of chimpanzee behavior is likely to pinpoint crucial areas in need of careful study in human subjects. Compared with human society, chimpanzee society involves extremely simple cultural traditions. The individual chimpanzee expresses his underlying motivations in a relatively straightforward way, with little masking of his responses. Thus it will be possible to tease out the biological roots of certain aspects of chimpanzee behavior despite its complexity; it may then be rewarding to reexamine the behavior in question in man to see whether similar factors may be involved.

SOME SIGNIFICANT LONG-TERM FINDINGS AT GOMBE

I should first like to outline some of the interesting findings that our longitudinal study is revealing, particularly those relating to the different stages of the life cycle in wild chimpanzees.

Period of Infant and Juvenile Dependence on the Mother

One of the striking findings to emerge from the study at Gombe is the length of the period of infant and juvenile dependence on the mother. The infant relies completely on his mother for food, transport, and protection until he is at least six months old. He may then take his first unsteady steps and begin to ingest minute amounts of solid food. However, riding on the mother continues to be his normal method of getting from place to place until, sometime in the fourth year, he begins to make increasingly longer journeys under his own steam. Milk continues to be his major source of nourishment for at least two years and possibly longer.

Youngsters are not finally weaned until their fifth or sixth year in most instances. The youngest to be weaned, to date, was four and a half years old; one, about six and

a half years old at the time of this writing, is still not finally weaned. Juveniles may continue to sleep in a nest with their mothers after being weaned. Usually they start sleeping in their own nests during their sixth or seventh year; this often coincides with the birth of a younger sibling.

During the final stages of weaning, a young chimpanzee may go through a period of apparent depression during which he frequently reverts to earlier forms of infantile behavior such as clinging to his mother during travel and maintaining much closer contact with her than previously. His frequency of play is likely to decrease at such a time, and he may appear listless and apathetic.

These symptoms were especially pronounced in one youngster, Flint, the son of a very aged female, Flo. Flint was weaned early, at four and a half years, toward the end of his mother's pregnancy. He went through a period of depression, as outlined above, during which he constantly solicited social grooming from Flo and, when she rejected any of his other demands (e.g., wanting a share of her food), was likely to fly into wild tantrums, screaming and hitting the ground—even, on occasion, attacking his mother. When the new infant was born Flint recovered somewhat: he stopped riding Flo's back, pestered her less, and in general seemed more lively (though he did continue to push into his mother's nest each night with his infant sister). A few months later, however, he once more became lethargic, once more demanded constant grooming, and reverted to riding his mother's back even though the new infant was clinging beneath. These symptoms showed no signs of abating until, when she was about six months old, Flint's sibling died. After this Flint became much more active, but he has remained abnormally dependent on his old mother and is still, at the age of eight years and three months, sleeping in her nest. He has traveled about without Flo for more than an hour or so only on very rare occasions.

Similar symptoms of depression have appeared in other five- and six-year-olds for a few months immediately following the birth of a sibling, when they therefore no longer have first claim on the caretaking responses of the mother. In some cases this appears to be offset by the intrinsic fascination of the new baby for the juvenile sibling (6).

The significance, for the youngster, of the affectionate bond with his mother was illustrated dramatically when three individuals, all between three and four years old, lost their mothers. Two of these were "adopted" by elder siblings with whom they traveled and slept at night. But in spite of this, and in spite of the fact that they seemed well integrated into the chimpanzee society, both became increasingly listless and both showed declining frequency of play during the first few months. Subsequently the behavior of one of them, Merlin, became increasingly abnormal and he developed a number of unusual patterns and stereotypes of the kind associated with early social deprivation in the laboratory chimpanzee (7). These included rocking back and forth, hanging upside down and motionless for minutes on end, and pulling out his hairs individually during self-grooming. In addition he showed

FIGURE 1
Merlin, one year after his mother's death



Photograph by E. Koning. Copyright: National Geographic Society.

more submission and aggression and spent more time in social grooming than is normal for youngsters of his age. In some social responses and in some tool-using techniques, Merlin's behavior appeared to show some regression (6). He finally died of a paralytic disease but was so emaciated by then that it was almost certain that he would have died anyway (figure 1).

The second orphan, Beattle, was adopted by an older and more experienced female than Merlin's sister. Beattle not only traveled and slept with her sister but was also permitted to ride about on her guardian's back, a luxury denied to Merlin, who was probably too heavy for his sister. Beattle's condition gradually improved and, about a year after her mother's death, her behavior was comparable with that of other youngsters her age. We might speculate that the added social security she derived from close physical contact with an experienced, almost-adult female who knew how to behave in moments of social excitement helped to minimize the psychological shock caused by her mother's death. We cannot, however, draw any firm conclusions from so inadequate a sample.

The third three-year-old had no elder sibling and after her mother's death wandered about for the most part quite alone. She quickly became lethargic, stopped playing almost entirely, and two months after her mother's death stopped visiting the feeding area. She was not seen again and was finally presumed dead.

During its sixth or seventh year a juvenile is increasingly likely to become accidentally separated from its mother. Initially this usually results in obvious distress on

the part of the child (and sometimes on the part of the mother, too). The lost youngster starts to whimper and then scream as it scans the countryside in all directions, often from the top of a tall tree. Perhaps it is only after a series of such accidental separations that the juvenile itself finally initiates a brief bout of independent travel. The young male may start to move about in groups without his mother during his seventh or eighth year, but he does not normally spend more than a few days at a time away from her until his ninth or tenth year. The female may remain almost constantly with her mother for even longer.

The long period of dependency on the mother may be considered adaptive in the chimpanzee, as in man, in relation to social learning. In simpler forms of life, much behavior is almost entirely genetically coded, although at all levels individual experience undoubtedly plays some role in the development of behavior. But as the mammalian brain becomes increasingly complex, culminating in the brain of higher primates and of man himself, social learning plays a vastly more crucial role. The adult chimpanzee lives in a complex society: he must learn to recognize 30 or more individuals in order to react appropriately when he meets them. In addition to appreciating the status of each of these individuals in relation to his own, he must also know how the presence or absence of a high-ranking associate may affect his own or his companions' ranking in the hierarchy in a given group. Chimpanzees have an elaborate system of communication with each other, and their behavioral repertoire also includes such complex patterns as cooperative hunting and tool using. Learning undoubtedly plays a major role in the development of a youngster, and the years when he associates closely with his mother are undoubtedly to his advantage: he can rely on her to react appropriately to individuals of high or low rank, to assist him in times of stress, and to lead him to appropriate food sources. Initially, when the mother cares for his every need, the infant can direct most of his energy into exploring his physical and social environment, and even when he becomes a juvenile and must to some extent fend for himself, he can still spend much time, under the benign leadership of his mother, in gradually acquiring the skills and competences that will fit him for adult life.

It has been shown experimentally that nonhuman primates are able to learn through direct observation of the behavior of others (8, 9), and the wild chimpanzee infant certainly has much opportunity for learning of this sort. An infant often watches intently while his mother, or another older individual, is engaged in tool using, nest making, feeding, and a whole variety of social behaviors. Subsequently he may be seen to imitate the actions he has observed—either immediately, as when he picks up a grass tool just discarded by his model and endeavors to use it in a similar manner, or a short while later, as when a youngster watches an adult male performing a charging display and, when things are calm again, repeats some of the display movements himself, often in a seemingly playful context. Behaviors of this sort may be practiced time and time again. Thus, while a gradual maturation of locomotor and manipulative patterns undoubtedly plays a vital role in the development of many of the complex activities of the adult chimpanzee, it is almost certain that learning, through both trial and error and direct observation of models, is also a very significant factor (10).

Affectionate Bonds in the Chimpanzee Family

When we refer to a family in chimpanzee society, we mean a mother and her offspring of different ages, together with her daughters' offspring. There is no "father" as such. The male, after playing his role in the conception of an infant, has no further part in the raising of an offspring since, as I already mentioned, no permanent pair bonds develop between male and female chimpanzees. Our study has revealed, however, that the affectionate bonds between mothers and their offspring and between siblings are sometimes strong and long-lasting.

As we have seen, the young male associates very closely with his mother until he is nine or ten years of age. Moreover, all five of the males we observed whose mothers were alive during their adolescence continued to associate with them frequently during that period. We have now been able to make detailed observations on the relationships between three old females and their socially mature sons—that is, males more than 15 or 16 years of age. One of these females had two such sons, the others one each. All these young males associated quite frequently with their mothers, and during such times social grooming between mother and son was frequent. Moreover, on a few occasions mothers were observed to hurry to the assistance of adult as well as adolescent sons; similarly, sons occasionally assisted their mothers. Sade (11) has reported similar lasting bonds between mothers and sons in the rhesus monkey population on Cayo Santiago.

Of interest is the fact that we have not yet observed a sexually mature male try to mate with his mother. Our sample size is too small for conclusions to be drawn about this, since it involves only one mother with two adult sons and another with one. However, in one instance the mother, during four days of oestrus, was mated by every other mature male in her group with the exception of her two adult sons, who were also in the group. Some inhibition of mother-son mating has been observed in two other longitudinal studies of primate societies, Japanese monkeys (12) and rhesus macaques (13).

Females tend to remain closely associated with their mothers for even longer than males but to date we have been able to follow the development of a relationship between a mother and her daughter into the latter's adulthood in only one case; in other cases either the mother or the daughter died before the daughter became adult.

Of the five mother-daughter pairs we have been able to follow through the juvenile and at least the early adolescent period, two mothers showed affectionate and protective behavior toward their daughters similar to that described for the mother-son relationship. However, the other three mothers were far less tolerant of their female offspring than of their sons, and all three daughters showed fear of their mothers in some contexts, especially in feeding situations. Nishida and Kawanaka (14) de-

FIGURE 2
The old female Flo with daughter Fifi, grandson Freud, and seven-year-old son Flint



Photograph by Baron Hugo van Lawick. Copyright: Gombe Stream Research Center.

scribe two adolescent females who initially associated frequently with their mothers but who, when they became sexually receptive, began to travel about independently of their mothers for much of the time.

In the case where we have been able to document the relationship with a mother and her daughter from the latter's infancy to social maturity (the old female Flo and her daughter Fifi), the bond between the two has always been of a very relaxed and tolerant nature. In 1971 Fifi had her first infant (our major hallmark for social maturity in a female), so that for the first time we now have the opportunity to study the development of bonds between grandmother and grandson and between nephew and uncle in wild chimpanzees (figure 2). Fifi still associates frequently with her mother and youngest brother, Flint, and the relationship between these individuals is presently being carefully studied by M. Hankey.

The extension of the affectionate bond between a mother and her offspring beyond weaning means that when the mother has a new infant this youngest member of the family is likely to have a great deal of contact with his older sibling, who will usually still be semidependent on the mother. He will also have (though to a lesser extent) contact with older independent siblings during those times when they associate with the mother. Thus, as Sade (11) has pointed out, the parent-offspring relationship may ramify into other relationships of potential importance.

We have already seen that an orphaned infant may be adopted by an older sibling; this was the case even when the caretaker (of an infant of 14 months) was a juvenile *male.* This orphan was too young to survive without her mother's milk, but if we examine the three cases in which the orphans were between three and four years old we find that one of those adopted by a sister survived to become a normal youngster; the second, although he eventually died, nevertheless lived for 18 months after the death of his mother. The third, with no elder sibling, dis-

appeared and almost certainly died within three months.

Observations on two pairs of brothers suggest that long-term bonds, similar to those observed between a mother and her son, may typically be formed between brothers. Similar close bonds are found in rhesus monkey brothers (11).

To date we have been able to study the relationship between only one pair of chimpanzee sisters, the eldest of whom is close to social maturity and the other approaching adolescence. These two associate with their mother almost all the time, and the bond between all three is very close.

Other than juvenile-infant pairs, we have been able to document in detail the relationships between brothers and sisters in only three families, and these data suggest that the bonds between siblings of different sex tend to become weaker as the individuals mature. Mating does occasionally occur between brothers and sisters, but it is extremely rare. One young female (Fifi) repeatedly ran off screaming when she was first approached by her two brothers in a sexual context, although she was quick to respond to the courtship displays of other males. Eventually both brothers did achieve sexual intercourse with their sister, but thereafter they were observed to copulate with her only a few times during the two years prior to her pregnancy. One other young female was observed to be mated by her elder brother only a few times during 12 or more periods of oestrus; another adolescent female, who has been sexually receptive for over a year, has not yet been observed mating with her elder brother.

Adolescence

Adolescence is another area about which our longitudinal observations are yielding interesting information.[1] This period of the life cycle is considered by some to be solely culturally determined and therefore unique to man. However, chimpanzees (as well as most other nonhuman primates) show both physiological and behavioral changes around puberty and during the following few years; this makes it appropriate to distinguish a period of adolescence. It commences just prior to puberty (approximately eight years of age) and ends when the individual reaches social maturity (about 12 or 13 years of age in the female and some two years later in the male).

The female, as we have seen, tends to associate with her mother for an even longer period of time than the male. Since a mother is quite likely to be nursing an infant during her daughter's adolescence (and even if she is not, she will certainly associate with other females and infants from time to time), it is unnecessary for the adolescent female to leave her family group in order to gain experience concerning her future role as a mother. Some adolescent females are fascinated by small infants and spend much time playing with, grooming, or carrying them. A female with this "maternal" approach is likely to become very preoccupied with her own infant sibling. Other females seem less interested, particularly for a while after the onset of regular sexual cycling.

The female sexual cycle is characterized by menstrual bleeding and periodic swelling and deturgescence of the anogenital region. The increase in genital swelling coincides with a very marked increase of attraction and receptivity to males. The average length of the cycle is about 34 days. Maximum genital swelling averages six to seven days; menstruation occurs between six and 12 days from the start of detumescence. These swellings first appear as a very slight turgidity of the clitoris in a seven- or eight-year-old female and, with each successive month, gradually get larger. Some five to ten months prior to menarche (between eight and a half and ten years of age for captive chimpanzees, according to Asdell [15] and Riopelle [16]) the adolescent female develops a much larger swelling and suddenly becomes sexually attractive to adult males.

Females show a great deal of individual variation in their initial responses to the sexual advances of mature males. Since courtship typically comprises many gestures that occur also in aggressive contexts, some females are extremely fearful initially and may try to escape, screaming, when a male approaches for copulation. Other females seem to take sexual approaches as a matter of course.

For several months prior to her first period of receptivity, one adolescent female (Fifi) frequently remained very close to older females who showed genital swellings, apparently in order to be on hand when they were mated. She would then either jump on the back of the other female and press her own genital area as close to the male's penis as she could or else go round behind him, turn her back on him, and press her genital area against his rump during copulation. As might be expected, she was quick to respond to the slightest courtship gesture when she herself became receptive for the first time.

In many groups of nonhuman primates, exchange of genes between groups occurs when males from neighboring ranges change groups. This is well documented for rhesus monkeys (13, 17), Japanese monkeys (12), and baboons (18), and it almost certainly occurs in gorillas (19, 20). Some male chimpanzees at Gombe have sometimes been absent from the feeding area for up to two months; during such times they may have visited neighboring communities and possibly mated with their females. If that were so, however, one would expect males from neighboring communities to occasionally mingle with individuals of our habituated group, but there is no evidence that this has occurred.

Transfer of females from one group to another is known to occur occasionally among baboons (18) and among gorillas (19). Among chimpanzees, however, there is much evidence that females, principally adolescent females, play a major role in widening the gene pool. At Gombe there are a number of records of adolescent females temporarily leaving their home communities during periods of oestrus and mixing and mating with males of neighboring communities (1). In at least two cases, young "stranger" females have gradually become integrated into our community of habituated chimpanzees,

[1] Anne Pusey, a graduate student at Stanford University, is currently making a detailed study of adolescence.

although to date no habituated adolescent female has permanently left our area. Nishida and Kawanaka (14) have now recorded 39 cases of females transferring from one community to another during oestrus; the majority of these females were adolescent.

It is especially interesting to note that it is the adolescent female herself who appears to initiate the change in range; she does not normally seem to be forced to leave her home area by threatening behavior on the part of males. In our own species, it is very often the women who leave their natal groups and move to live with their new husbands in villages—or even countries—that may be quite strange to the women concerned.

Adolescence often seems to be a stressful period for the male chimpanzee. He has a growth spurt after which he tends to become more aggressive, particularly toward females. By the time he is about ten years old he is able to dominate many females who a few years earlier were themselves able to subdue him with ease. At the same time he must learn to behave with increasing caution to avoid arousing the aggression of the mature males, some of whom are quick to threaten him for behavior they tolerated when he was a mere juvenile. Nevertheless, despite the fact that he may become increasingly fearful of these older males, he often seems to deliberately choose to associate with them. Many of his first journeyings without his mother are made with adult males.

When he is with older males the adolescent tends to occupy a peripheral position in the group. He desists from sexual activity with a popular female—or at least waits for a quiet moment when the big males are resting peacefully. He sits a few yards away from a group of males who are grooming each other but usually does not dare to join them. He often feeds at a slight distance from his superiors. Yet he can often be observed watching the older males very intently.

After associating for a while with his superiors, and particularly if he has been the victim of their aggression, the adolescent male moves away from them and either travels about for a while on his own or returns to his mother if she is still alive. Indeed, his relationship with his mother may well be one of the most stabilizing factors at this time of social change for, despite his larger size and more aggressive behavior to females in general, his behavior toward her remains remarkably constant.

At some period during his adolescence, the young male may engage in a number of status conflicts if there is another male of similar age and social rank as himself with whom he associates quite frequently. These conflicts mainly involve bluff, but may sometimes lead to physical attacks. The charging display appears to have special significance in this context. This is a typically male performance that occurs in a variety of situations, principally when a male arrives at a new food source, when he meets up with other chimps after a separation, or when he is frustrated in the attainment of some goal (when, for instance, he is inhibited from feeding or mating due to the proximity of a superior male). During the display he runs slowly or very fast, on all fours or upright, with hair bristling; he may drag or throw branches, hurl rocks, sway branches, leap through the trees, or (in the case of two individuals) beat his chest like a gorilla. This display enables the performer to look larger, more powerful, and more dangerous than he may really be; it appears to be a useful technique in the acquisition of a higher social status. The more frequent and the more impressive the display, the more rapidly the adolescent may rise in the hierarchy. Since such a display only seldom involves a physical attack on a rival it is adaptive in that it enables a chimpanzee to acquire status without any great risk of injury to himself.

During the final years of adolescence the male gradually begins to threaten and occasionally attack the lower-ranking males of the adult male hierarchy. When he is able to subdue even one of them consistently he can be considered part of their hierarchy and thus socially mature.

Dominance

The past ten years of research at Gombe have brought to light some interesting facts concerning dominance, particularly with regard to those qualities which enable a chimpanzee to acquire the alpha position in his community. In 1963 Goliath, a powerful and aggressive male in his prime (perhaps about 25 years of age) was the alpha male. He had a spectacular charging display during which he covered the ground very fast indeed, dragging and occasionally hurling branches. Early in 1964, however, Goliath was displaced from his top-ranking position in the community by an older and much less robust male, Mike. Mike apparently accomplished this by means of bluff and, without doubt, superior intelligence.

In 1963 Mike was among the lowest-ranking of all the adult males, frequently threatened or even attacked by most of the others. Then he began to incorporate empty four-gallon kerosene cans into his charging displays. Other males had occasionally seized hold of such a can (from my camp area) during a display, but it seemed that only Mike was able to profit from the experience and deliberately use cans to enhance his performance. He soon learned to keep up to three cans ahead of him as he ran, very fast, hitting or kicking them along as he went. He made a great deal of noise; other males as well as females and youngsters rushed out of his way.

After charging past a group of males a few times and scattering them, Mike then sat with his hair erect; the other males, previously his superiors, approached him with gestures of submission or appeasement, crouching before him, touching, kissing, or grooming him. Mike rose to become alpha male of his community in about four months without engaging in any actual attacks on other males that we observed. He maintained that position even when we took the cans away (for we too disliked the noise) for the following six years.

Mike, in his turn, was relieved of his top-ranking position by a younger, very large, and extremely aggressive male, Humphrey. For about a year previously Mike, who was getting old, had appeared uneasy in his alpha position and was being ignored during displays by some of the younger males. Only one fight was observed between

FIGURE 3
Flo begging for meat from the alpha male Mike



Photograph by B. Gray. Copyright: Gombe Stream Research Center.

Mike and his successor, although other incidents may have occurred prior to this. Unlike Goliath, who had maintained a very high-ranking position for several years after losing his alpha rank, Mike dropped rapidly to a low position in the hierarchy. This was possibly due to the fact that at the time of the takeover, he was very much older than Goliath had been (21).

In chimpanzee society dominance is something of a conundrum. The usual interpretation of the phenomenon is that it enables a high-ranking individual to have prior access to desirable foods, females, or resting places. Competition over these resources is rare in chimpanzee society, at least at Gombe. Possibly a high-ranking position is desirable because, once an individual has attained it, he need no longer fear threat or attack from too many other chimpanzees of higher rank. Whatever the underlying motivation or ultimate reward, however, many chimpanzees do seem preoccupied with raising their social status, while others are less concerned and tend to keep out of the way during times of social excitement.

The story of Mike's rise to alpha male provides an excellent example of the way in which chimpanzees typically rely on threat or bluff rather than actual physical violence in their interactions with each other. Fights do occur, but they are generally brief; even when they appear vicious, they seldom result in observable physical injury. Moreover, after a fight the victim ordinarily approaches the aggressor showing postures and gestures that have been labeled submissive or appeasing and in response to which the aggressor usually reaches out to touch or pat or kiss the subordinate. This reassurance behavior serves to calm the agitated victim and helps to ensure generally relaxed and peaceful relationships among those individuals who frequently associate in the community (22).

SIMILARITIES IN CHIMPANZEE AND HUMAN BEHAVIOR

I have outlined various aspects of the life cycle of wild chimpanzees that it has been possible to document because of the long-term nature of our study. As knowledge is gradually accumulated about a variety of different monkey and ape species, it is possible to trace certain evolutionary trends of increasing complexity, culminating in man. Some of the data I have discussed so far clearly illustrate the high position of the chimpanzee on this evolutionary ladder. If, for instance, we take a primitive New World monkey, the marmoset, we find that infants are weaned at six months and attain sexual maturity at 14 months. The gestation period is 140 days, and estimated longevity in captivity about ten years (23). If we next take the rhesus monkey we find that weaning takes place any time between six months and a year, or sometimes a little later. The monkey is reproductively mature at about four years of age, though it does not acquire full size until about ten years. The average gestation period is 164 days and the life expectancy in captivity about 30 years (23). Now we come to the chimpanzee, where the youngster is not weaned until he is about five years old and is dependent on his mother for another three or four years, where reproductive maturity is not reached until seven to eight years in the male and (in the wild) about 11 or 12 years in the female. Moreover, the male does not become socially mature for some five or six years after puberty and is unlikely to be reproductively effective in his society until he is at least 12 years old and probably older. The longevity record is almost 50 years in captivity. In all these characteristics the chimpanzee can be seen to be very close indeed to man.

I should now like to discuss some of the behavior patterns of chimpanzees that strikingly resemble some patterns in man.

Cooperative Hunting and Food Sharing

As mentioned earlier, chimpanzees are omnivorous. They quite frequently hunt fairly large prey animals such as the young of bushpig, bushbuck, and baboons, and young or adult monkeys of various species. Sometimes the capture of prey is a very individual and opportunistic event: one chimpanzee happens upon a suitable victim, seizes and kills it, and begins to feed. On other occasions, however, male chimpanzees may hunt in a group and show behavior that can clearly be labeled as cooperation. For instance, one chimpanzee may cautiously creep up a tree toward a potential victim, such as a young baboon that has become slightly separated from its troop, while other male chimpanzees stand around the base of this tree and also near trees that might act as escape routes

clarity and becomes muddied by much foreign matter. The patients in many prior studies showed some similarities to patients in the current study, but the factor labeling among studies sometimes differed, so that what is similar can often only be guessed at. To me the confusion says that groups of men and women suffering from alcoholism have a wide dispersion of miseries, behaviors, attitudes, and prognoses. The disorder would seem to be best regarded as multidimensional rather than as a unitary illness with differing manifestations—symptoms, not yet comprising a syndrome.

Dr. Evenson and his associates plan to use this study as a base in structuring other treatment-outcome studies. I hope it won't be long before an assessment-assignment method will evolve that enables us to draw, from patients' self-descriptions, guidance toward providing an effective treatment program for this large, seriously handicapped group.

tom, behavior, attitude, etiology) would thus not necessarily be invariant across samples. An analogy might be made to studies of groups formed on the basis of fever as a presenting symptom.

In comparing the present study with studies of similar populations (4, 5), some consistencies do emerge. All three studies found factors related to marital or family status, psychological or social reasons for drinking, and factors variously related to control, dependency, and continuous versus periodic drinking. Two of the three studies found factors related to employment, physical health or symptoms, and motivation for help or treatment. Factors unique to the present study include trouble with the law, drug abuse, age, tolerance, family drunkenness, and parental attitudes, none of which is surprising.

Various studies have looked for typologies within the alcoholic nomenclature on the basis of Minnesota Multiphasic Personality Inventory scores (18), 16-PF scores (7), sex differences (6, 19), and character types (20). The Q-factor subtypes presented here are based only on reported behavior elicited by an alcoholism questionnaire. The discriminating variables reported here appear to contrast alcoholics with poor and good prognoses, as well as to identify a third group that emphasizes sex differences. These discriminators have been noted by others (19–22).

We currently plan to modify our Alcohol History Form in order to describe more succinctly and focus more clearly on those items and item clusters that appear to be most discriminating. We are encouraged by the fact that many of them have been shown to be relevant to treatment outcome (21–24), and we plan to explore their usefulness in treatment-outcome studies of alcoholic inpatients within the Missouri Division of Mental Health.

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DISCUSSION

EUGENE M. CAFFEY, JR., M.D. (Bowie, Md.)—This substantial piece of work by Dr. Evenson and colleagues contains much material of interest to me and others who work for the Veterans Administration. It is estimated that of the nine million alcoholics in the United States, 3.1 million are veterans. In the last fiscal year (1971), we treated in our hospitals 105,000 veterans with primary or secondary diagnoses of alcoholism. From day to day an average of 1,230 veterans are treated in our specialized alcohol treatment units. We need help. How might this compilation of experience in Missouri assist us?

The authors' overall approach of examining alcoholics' responses by means of factor analysis is used often, as their references show. However, the large number of subjects and the inclusion of women are unusual, as is the enormous number of variables they chose for analysis. This kind of search for a typology and the possibility that we can, by computer, assign patients to the right treatment program are extensions beyond the commonplace.

Associates more expert in statistics confirm my impression that the design and management of the analysis were appropriate as well as comprehensive. Perhaps more factors were preserved for rotation than were necessary; and perhaps the among-type differences revealed by the discriminant analysis were artificially enlarged by analyzing groups previously defined on the basis of within-group similarity and among-group differences. However, the results were not altered by these esoteric considerations. With all my exogenous confidence, though, I wonder at the empirical basis for the statement, "It should be noted, however, that this hit rate [90 percent correct assignment to one of the three types] would probably decrease on cross-validation."

When we return to the array of other studies with which this one is compared, our pool of information loses its statistical

TABLE 3
*Discriminant Function Classification of Three Q-Factor Groups of Alcoholics**

Q-Factor Classification	Discriminant Function Classification			
	Group 1	Group 2	Group 3	Total
Group 1	67	6	0	73
Group 2	5	53	2	60
Group 3	0	1	12	13
Total	72	60	14	146

* Hit rate=90 percent.

tively related to drinking on the streets and negatively related to drinking at home.

Factor 15 essentially reflects a negative attitude toward Alcoholics Anonymous as a treatment modality.

The transposed or Q-factor analysis resulted in seven patient clusters. The first three clusters accounted for 144 of the 146 subjects. The remaining two subjects could be classified by substantial loadings (0.58–0.59) on one of the first three clusters, and they were so assigned. The remaining factor loadings on all three clusters ranged from 0.62 to 0.99, and the discriminant function analysis was made on the basis of these three groups. The three groups or clusters consisted of 73, 60, and 13 subjects, respectively. The results of the discriminant function analysis are shown in tables 2 and 3.

Table 2 shows the first 23 items that entered the discriminant function, ranked in descending order according to their unique contribution to discrimination across the three groups, along with the group means for each item. High means among the three groups are asterisked. It can be seen that group 1 is characterized primarily by younger, married, and employed subjects. Members of group 1 are more likely to be living with their primary family group. In contrast, members of group 2 are more likely to be older, unemployed, and living alone or with friends. In addition, members of group 2 show signs of greater deterioration, such as blackouts, benders, and nightmares. Members of group 2 also tend to drink more continuously and to show more invalid responses to the questionnaire. Group 3 appears to consist primarily of female alcoholics. In addition to the sex difference, members of group 3 tend to live with their spouse or a relative and to drink at a friend's home. Members of group 3 also tend to blame their spouse for their drinking and to be positively motivated for clinic treatment, but negatively motivated toward Alcoholics Anonymous.

The Linear Discriminant Function (LDF) program used in the data analysis is a stepwise program. As a result, the program initially examined the relationship between 80 variables and membership in the three Q-factor groups and found that the variable "unemployed" was the best discriminator across groups. The program then looked at the relationship between the remaining 79 variables and group membership, but with "unemployed" used as a covariate (statistically controlled). In other words, in the subsequent steps it was as if all patients had the same employment status. At the second step the variable "age" entered the LDF. After the second step, it was as if all patients were the same age (as well as having the same employment status). Thus each subsequent variable entering the LDF contributed a unique source of variance. In short, younger age alone did not account for the social-historical differences between groups 1 and 2, nor did sex alone account for the differences in group 3. The variables shown in table 2 were the first 23 variables entered by the LDF program, and the remaining variables contributed little to group discrimination.

Table 3 shows the efficiency of the derived discriminant function in assigning membership to one of the three groups. The achieved hit rate of 90 percent suggests that it is feasible to assign newly admitted alcoholics to one of three groups, based on their responses to the Alcohol History Form. It should be noted, however, that this hit rate would probably decrease on cross-validation. It seems reasonable to hypothesize that, for instance, membership in group 2 would be related to subsequent poor outcome or adjustment. If, in our continuing studies, this proves to be true, then the LDF formula can be used as a prognostic indicator and special programs can be developed to treat this group.

DISCUSSION

It is particularly interesting to compare the results of this factor analysis with similar studies recently reported. In particular, we would contrast our results with the study of alcoholic inpatients at Fort Logan, Colo. (4). The Fort Logan study is unique in that the item factors themselves seem to form a typology. That is, the first three factors are roughly related to "broad-severity hard-liquor drinkers," "social beer drinkers," and "deteriorated wine drinkers," respectively. In contrast, we find all three types of alcohol intake related to a single factor, "total ethyl alcohol intake." In addition, none of the three types of alcohol intake in our study differentiates across the three patient clusters or types as identified by Q-factor analysis. Another factor-analytic study by Hoffmann and associates (5) found no specific factors for either alcohol intake or type of beverage. It should be noted that these factor studies had patient populations similar to our own.

A factor-analytic study of psychiatric symptoms by Miller and associates (16) concluded that alcoholics are substantially more labile in their manifestations of psychiatric symptoms at time points before, during, and after treatment as compared with patients with other psychiatric diagnostic classifications. Other investigators (17) have noted that the alcoholic has vastly different subjective feelings depending on whether he was tested during withdrawal or not. Thus the timing of data collection in alcoholism studies may result in different factor structures. It is also possible that persons designated as alcoholic form a homogeneous group only by virtue of a single symptom: drinking to excess. Other factors (symp-

holism. Such types would, presumably, cut across symptomatic drinking patterns.

Finally, the groups found by Q-factor analysis were analyzed by means of a stepwise linear discriminant program (15) in order to determine which items from the Alcohol History Form contributed a unique source of variance in discriminating across groups. Eighty of the 118 variables were selected for discriminant analysis, and care was taken to ensure that the 80 items reflected the major independent sources of variance in the original factor analysis.

RESULTS

The results of the factor analysis are shown in table 1. Two separate Varimax rotations were employed. The first rotation included 12 factors with Eigen values (relative proportion of variance) greater than 2. The second rotation included 19 factors with Eigen values greater than 1. Our primary consideration was to note whether rotating fewer factors would significantly alter the factor structure. The first 12 factors for both rotations were essentially identical. Table 1 shows 15 factors, since the remaining factors tended to replicate earlier factors or to represent trivial and artifactual content. Factor loadings and frequency of endorsement are also shown.

Factor 1 is a cluster of items representing psychological reasons for drinking. Although loneliness is the most frequently endorsed item, items referring to feelings of sadness, anger, and self-pity load the most strongly on this factor.

Factor 2 relates to use of other drugs, particularly as a substitute for alcohol. Amphetamines, opiates, and mind expanders are the most frequently noted, in that order.

Factor 3 relates primarily to marital status and can probably be best described as living with spouse and dependents, as opposed to being single and living alone.

Factor 4 relates to loss of control over drinking behavior and advanced symptoms such as benders, blackouts, and morning drinking.

Factor 5 is primarily related to the age of the patient and is therefore also related to the number of years of drinking and age when the patient was first hospitalized for drinking.

Factor 6 reflects total amount of alcohol intake and includes loadings for intake of beer, wine, and hard liquor. The highest loading is on a derived score reflecting total intake of ethyl alcohol. This factor is of particular interest, since it includes all forms of alcohol as opposed to reflecting differing patterns for beer, wine, and liquor drinkers.

Factor 7 is a cluster of items indicating that the patient's parents were not permissive regarding the use of alcoholic spirits and that the relationship between patient and parents was not a close one.

Factor 8 consists of items indicating that the patient's biological relatives or immediate family members are likely to be alcoholic or have problems with alcohol.

TABLE 2

Discriminant Function Analysis for Three Groups of Alcoholics

Item	Univariate F Value	Group 1 Mean	Group 2 Mean	Group 3 Mean
1. Unemployed	16.07	0.27	0.72*	0.62
2. Age	5.60	43.32	48.70*	44.54
3. Has blackouts	4.83	0.77	0.88*	0.54
4. Lives with relatives	4.54	0.22	0.27	0.62*
5. Sought help from spouse	3.92	0.29	0.12	0.31*
6. Sex	3.34	1.07	1.17	1.39*
7. Drinks at friend's home	3.12	0.04	0.03	0.15*
8. Lives with friends	2.55	0.03	0.10*	0.00
9. Sought help from physician	2.41	0.32*	0.27	0.15
10. Has withdrawal symptoms (nightmares)	3.04	0.11	0.18*	0.15
11. Holds spouse responsible	1.82	0.07	0.07	0.15*
12. Goes on benders	1.76	0.94	0.95*	0.77
13. Home problems precipitated drinking	1.87	0.25*	0.18	0.15
14. First started drinking socially	2.31	0.15	0.18*	0.00
15. Spouse has negative attitude	2.32	1.97*	1.38	1.54
16. Nervousness precipitated drinking	1.80	0.60	0.70*	0.62
17. Has negative attitude toward Alcoholics Anonymous	1.86	0.92	1.08	1.23*
18. Frequency of meals	1.74	7.34*	6.23	6.77
19. Biological relative is an alcoholic	1.67	0.99*	0.60	0.85
20. Sought help from minister	1.60	0.30*	0.18	0.23
21. Sought help from clinic	2.25	0.45	0.53	0.54*
22. Frequency of drinking	1.97	2.11	2.92*	2.77
23. Number of invalid responses	4.60	0.43	1.27*	0.23

* The highest mean value for the three groups on this item.

Factor 9 reflects frequency of drinking (drinking throughout the day as opposed to drinking periodically or during evenings and weekends) and deterioration (number of invalid responses).

Factor 10 contrasts the employed alcoholic (who has problems with his supervisor and who misses work) with the patient who has no job.

Factor 11 contrasts the alcoholic who sees himself as responsible for his problem with those who put the blame on others, especially spouse or friends.

Factor 12 relates to those alcoholic patients who have sought and accepted help in the past. Main sources of help include physicians, ministers, clinics, relatives, friends, spouses, Alcoholics Anonymous, and previous hospitalization.

Factor 13 consists of items suggesting that the alcoholic feels his tolerance is decreasing and reports fearfulness accompanying withdrawal.

Factor 14 relates to trouble with the law. It is posi-

TABLE 1
Results of Varimax Factor Analysis of 118 Alcoholism Questionnaire Items

Factor	Eigen Value	Factor Loading	Frequency
Factor 1: Psychological precipitants	7.47		
Sadness		0.69	224
Anger		0.66	225
Self-pity		0.65	291
Conscience		0.60	225
Loneliness		0.59	409
Home problems		0.53	269
Factor 2: Drug abuse	4.04		
Times arrested for drug abuse		0.71	—
Drinks less when using drugs		0.71	46
Money per week spent on drugs		0.70	—
Age when started using drugs		0.65	—
Uses drugs excessively			
Mind expanders		0.63	14
Opiates		0.62	31
Amphetamines		0.60	32
Factor 3: Marital status	3.85		
Lives with spouse		0.81	349
Spouse contributes money to family		0.66	270
Spouse has negative attitude toward drinking		0.62	541
Number of dependents		0.49	—
Sought help from spouse		0.46	191
Factor 4: Loss of control	3.38		
Loses control		−0.67	971
Goes on benders		−0.58	916
Can't stop drinking		−0.54	724
Drinks in the morning		−0.49	844
Has blackouts		−0.45	834
Factor 5: Age	3.19		
Number of years of drinking		−0.81	—
Age		−0.81	—
Age when first hospitalized for drinking		−0.66	—
Factor 6: Alcohol intake	2.90		
Total intake		0.98	—
Hard liquor		0.74	—
Wine		0.66	—
Beer		0.56	—
Factor 7: Parental influence	2.46		
Permissive father		−0.78	255
Permissive mother		−0.76	200
Not close to father		0.74	341
Not close to mother		0.74	191
Factor 8: Alcoholic relatives	2.45		
Biological relative		0.82	358
Father		0.81	309
Mother		0.65	71
Nonbiological parent figure		0.58	60
Factor 9: Drinking frequency	2.36		
Time of drinking		0.93	—
Number of invalid responses		0.93	—
Factor 10: Employment	2.26		
Supervisor has negative attitude		0.85	272
Unemployed		−0.83	442
Misses work		0.56	542
Factor 11: Person held responsible for patient's drinking	2.17		
Spouse		−0.87	72
Friend		−0.82	34
Self		0.63	740
Factor 12: Seeks/accepts help from others	2.06		
Physician		0.69	306
Minister		0.65	200
Clinic		0.54	485
Relative or friend		0.48	166
Spouse		0.41	191
Hospital		0.41	—
Factor 13: Decrease in tolerance	2.00		
Decrease in tolerance to alcohol		0.90	469
Withdrawal symptoms			
Feels frightened		0.87	563
Has the shakes		−0.60	577
Factor 14: Trouble with the law	1.90		
Number of arrests for drinking		0.70	—
Time spent in prison for drinking		0.68	—
Drinks on the street or in cars		0.58	71
Factor 15: Negative attitude toward Alcoholics Anonymous	1.77		
Has no plans to attend meetings		0.75	78
Has not attended meetings		0.58	287
"Don't know" responses		0.58	211
Sought help from Alcoholics Anonymous		−0.49	450

Factors in the Description and Grouping of Alcoholics

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IVAN W. SLETTEN, M.D., AND RAYMOND R. KNOWLES, M.B.B.S., D.P.M.

Data collected from 1,023 alcoholic inpatients by means of a self-rating instrument were used to explore the dimensions and subgroupings of alcoholism. Fifteen factors derived from a factor analysis reflected the variety of psychological and social dimensions of the problem. Three subtypes of alcoholism emerged from an inverted (Q) factor analysis. These subtypes were characterized by means of a linear discriminant function analysis. Two subtypes appeared to be related primarily to severity, and the third primarily to sex and marital variables.

THERE HAS BEEN a continuing interest in the development of alcohol behavior-history questionnaires designed to gather information from those patients designated as alcoholics. These instruments typically include items concerning patterns of drinking behavior, history, symptomatology, and attitudes (1–3). Factor analyses of such scales suggest that they are multidimensional, although the factor structures are not uniformly replicated (4, 5). There has also been considerable interest in identifying typologies (6, 7) and phases of alcoholism (8) with a population of alcoholic patients. The word "alcoholic" apparently does not pertain to a unitary set of symptoms, much less to a particular kind of etiology. Yet the need for careful description of the dimensions along which people classified as alcoholics can be seen to differ has important implications both for prognosis and for treatment-outcome studies.

As part of a statewide computerized information system called the Standard System of Psychiatry (SSOP), standardized information has been routinely collected from inpatient alcoholics within the Missouri Division of Mental Health for several years. Information is collected on a checklist form and transmitted by means of leased lines to a computer center at the Missouri Institute of Psychiatry in St. Louis, where it is processed and stored and a computer report is printed out at the originating terminal. Details of the SSOP system have been presented elsewhere (9). Data for analysis are available on request from the central computer files and include information collected specifically on alcoholism by means of an instrument called the Alcohol History Form.

The purpose of this study is to analyze and describe those dimensions and subgroupings found in an inpatient population of alcoholics within the Missouri Division of Mental Health, based on information routinely collected by means of the Alcohol History Form.

METHOD

Data for the study were gathered from alcoholic treatment centers at eight facilities throughout the Missouri Division of Mental Health between August 1968 and September 1969. During this period of time patients admitted to inpatient services at the alcoholic treatment centers routinely completed a two-part Alcohol History Form (10) consisting of 76 items that generated 157 variables. Patients completed the checklist questionnaire themselves, with instructions and guidance from the staff. A total of 1,395 inpatients completed at least one part of the questionnaire. Of these, 1,023 adequately completed the entire instrument; these protocols were the basis for the present analysis. The mean age of the sample was 45.6 years (about 84 percent were between 30 and 59), and 13.7 percent of the sample were women. About 22 percent of the sample were also involved in some form of drug abuse, although only six to eight percent used dangerous drugs or narcotics to any significant extent.

Of the 157 variables, we chose 118 for factor analysis, taking particular care to eliminate redundant and artifactually related items. Following item intercorrelation, principal components analysis and Varimax rotation to simple structure were employed (11). The aim of the factor analysis was to clarify symptom and attitude patterns as reflected by the questionnaire.

Subsequently, a subsample of every seventh patient (N = 146) was employed to generate a transposed correlation matrix, which was similarly factor analyzed. Such a transposed or Q-factor analysis (12) has typically been employed to explore the domain of patient clusters or typologies (13, 14). The present aim of the Q-factor analysis was to investigate subgroupings of alcoholics that could conceivably represent typologies or phases of alco-

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972. The original title of this paper was "Alcoholism: Symptom or Syndrome?"

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charged as improved with a diagnosis of psychophysiologic skin reaction and psychoneurotic depression. AMHTS had suggested nonadmission.

Among the eight other service misclassifications for which records were available and in which the patient was treated by surgery or medicine although AMHTS had suggested psychiatry, there were four cases in which the discriminant function analysis of AMHTS test results was correct. One patient was admitted to medicine for evaluation of low back pain. The final diagnosis was conversion reaction, and the patient was referred to psychiatry, as suggested by AMHTS. Another patient was admitted to medicine for evaluation of gastric ulcer. The final diagnosis was psychophysiological gastrointestinal disorder, leading to a referral to psychiatry, as suggested by AMHTS. A third patient appeared in the admitting office complaining of tenseness, nervousness, and inability to sleep. He wanted an opportunity to talk to a doctor. This was provided by a physician on the medicine service, who decided that the problems were not serious enough for referral to psychiatry or for admission. AMHTS had suggested referral to psychiatry. The fourth patient was worked up by surgery in the admitting office; there was no record of any surgical findings. This patient had a long history of psychiatric problems and has a service-connected disability for anxiety neurosis. AMHTS suggested referral to the psychiatry service.

In the remaining four cases there was no indication in the hospital record that another service should have been involved.

In summary, of seven disagreements between AMHTS and the admitting physician's decision to assign to the psychiatry service, the classification suggested by AMHTS had some validity in three cases. Of the eight disagreements where the patients were assigned to medicine or surgery although AMHTS had suggested psychiatry, the AMHTS classifications were found to be correct in four cases. Altogether, among the 15 disagreements, AMHTS turned out to be essentially correct in its assignment of seven cases.

DISCUSSION

With the increasing number of patients being referred for care to the VA hospital system, improved techniques for working them up efficiently and assigning them to proper treatment programs are needed. The results of this study suggest that AMHTS can be an aid to the admitting physician, expecially with respect to psychiatric patients. The present AMHTS system provides a fairly good simulation of the physician's decision in the admitting office.

The findings of this study also indicate that classification as to which service should care for the patient, and whether he should be admitted to the hospital, remains ultimately a medical decision. In addition to assisting the physician by suggesting how to assign the patient, AMHTS provides a history and the results of a battery of physiologic, psychological, and chemical tests. These speed up and simplify many of the routine aspects of a patient's admission work-up.

These findings point toward ways in which the AMHTS system can be improved. The VA admitting office decision may be based on information that is not available to AMHTS at present. For example, the questionnaire does not take into account the patient's chief complaint or presenting problem. We are altering the questionnaire to make it more comprehensive and better related to the purpose of the patient's hospital visit.

On the other hand, the AMHTS system provides information that has not formerly been used by the VA in the decision-making process. An example of this is that three nonadmitted patients were recalled to the hospital and admitted on the basis of the following findings: two had EKG abnormalities and one had an abnormal chest X ray.

The results with the psychiatric questionnaire scales suggest techniques of approaching medicine and surgery. We have recently been analyzing the questionnaire material for the triage and admission/nonadmission processes primarily by body system—heart symptoms, eye symptoms, etc.—except in the case of psychiatry, where we have utilized three previously validated psychiatric instruments.

We are now recombining all the questionnaire items on the basis of judgments by experienced physicians as to whether the items are primarily medical, surgical, or psychiatric in nature. The reorganized data will be subjected to new multivariate analyses to determine whether the modified questionnaires produce improved factors and discriminations with medical and surgical patients (as well as with psychiatric ones) for use in triage and admission/nonadmission decisions.

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Do your hands sweat or tremble enough to bother you?
Do you smoke?

The Holmes and Rahe Scale

The Holmes and Rahe Scale (3) provides a quantifiable measure of ongoing social stress. It includes 41 items; following are some examples: death of a spouse, divorce, jail term, personal injury or illness, retirement, sex difficulties, business adjustment, change in financial state, mortgage of more than $10,000, son or daughter leaving home, outstanding personal achievement, and wife beginning or stopping work.

Selective Service Questionnaire

Finally, a set of psychiatric questions was derived from the Selective Service questionnaire; this provides information about personal and familial psychiatric history and thus offers another dimension in assessing the patient's psychiatric condition. Here are the questions:

Do you smoke now?

Have any of your blood relatives suffered from the following: alcoholism or drug problems, nervous or emotional problems, or suicide attempts?

Have you had any of the following: nervous or emotional problems, alcoholism or drug problems, suicidal thoughts or attempts, or epilepsy?

METHOD

The present report contains findings on psychiatric patients seen in the admitting office on whom a decision had been made whether or not to admit for inpatient care. In particular, we are looking at whether AMHTS can simulate the physician's decisions in the admitting office. A preliminary study providing test-by-test analysis of data from these investigations has been presented previously (6).

Veterans were tested by AMHTS while they were undergoing the admitting process at the Gainesville Veterans Administration hospital. Testing was voluntary; 241 of the 818 patients contacted agreed to be screened. Fifty-two of these patients were referred to the psychiatry service for evaluation. Subsequently, 28 patients were admitted and 24 patients were not admitted to the hospital. (During the study 30 percent of all veteran applicants who appeared at the admitting office were not admitted.) The admitting physicians did not receive any information about the patient's test results until after they had completed the admission procedure and decided whether or not to admit the patient. There were no significant racial or age differences between the admitted and not-admitted psychiatric patients.

In the Veterans Administration hospital admission procedure there are two main decisions: first, which service—medicine and its specialties, surgery and its specialties, or psychiatry—should work up the patient, and second, whether the patient requires admission to the hospital. The present research looks at both of these. The research subjects are therefore divided into three main categories and the two classes of admission/nonadmission.

Stepwise discriminant function analyses were performed by hospital service with respect to the referral to service and admission/nonadmission decisions. A factor analysis was performed from the AMHTS questionnaire data. Factor scores were computed for each patient and then submitted to discriminant function analysis.

This report focuses on results for psychiatric patients; further work is being done on medical and surgical patients and the results will be reported later.

Our final task in this study was to examine the hospital records and AMHTS printouts on all participating psychiatric patients with respect to the two admitting procedure decisions and the analysis by discriminant function. From this examination we sought to determine the reasons for the failure in agreement between the multivariate analyses and admitting physician's decisions.

RESULTS

A discriminant function analysis was done using all AMHTS questionnaire items and physiological and chemical tests. In the triage decision, the total psychiatric scale was the only discriminating item; it successfully simulated the assignment of patients to the psychiatric service. When the factor scores in the 20 questionnaire indices were used in the triage discriminant function, the psychiatric factor was highly significant ($F = 26.2$). Of the 52 patients treated by the psychiatric service there were seven disagreements between the admitting physician's decision and the AMHTS classification with respect to the service triage and admission/nonadmission. Hospital and AMHTS records for all these patients were available for study. Six of the disagreements involved the service and one the admission decision. In addition to these seven, there were nine patients treated by medical and surgical services whom AMHTS had assigned to psychiatry. The records of all but one of these patients were available for review.

Among the six patients treated by psychiatry who were assigned to another service by the entire AMHTS system there were two cases in which AMHTS was not in error. One patient was admitted to psychiatry for workup of chronic diarrhea following peptic ulcer surgery in 1964. AMHTS suggested referral to the surgery service. This patient obviously bordered on two services.

The other patient in psychiatry complained of headaches. Four months earlier this patient had been operated on for a malignant tumor of the bladder, and he was still receiving follow-up treatment for this problem. AMHTS suggested referral to the surgery service. He too was obviously a borderline case. In the other four cases there is no indication in the hospital record that another service should have been involved.

The one psychiatric patient who was misclassified according to the admission decision was admitted for evaluation of a number of somatic complaints: backache, headaches, muscle spasms, and dermatitis. He was dis-

Psychiatric Screening with Automated Multiphasic Health Testing in the VA Admission Procedure

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A total of 241 veterans who applied for admission to a Veterans Administration hospital underwent automated multiphasic health testing and services (AMHTS). The authors compare test findings with the admitting physician's decision as to whether or not a patient should be worked up by the psychiatry service for admission. The findings indicate that an AMHTS system may be able to assist the admitting physician in making this decision: Discriminant function analysis from the patient's history questionnaire simulated the physician's decision fairly well.

ONE USE OF AUTOMATED multiphasic health testing and services (AMHTS) that offers great promise for the efficient delivery of health care is in the selection and triage of patients for psychiatric and other types of psychological, medical, and surgical services (1, 2). AMHTS provides the physician with an inexpensive but highly accurate overview of the status of his patient's physiological, biochemical, and psychological systems. It also provides a summary of family and personal medical history, highlights current symptomatology, and can offer the physician a health risk evaluation for each of his patients.

In researches at the University of Florida College of Medicine and the Gainesville Veterans Administration hospital, we are assessing the value of psychosocial tests and instruments in an AMHTS system for separating normal persons from those with medical and psychosocial difficulties, and for assigning those with emotional problems to appropriate medical social care. As part of the project we have been investigating applicants in the hospital admitting office and attempting to discover ways in which AMHTS can assist this process.

The standard tests and procedures we are utilizing in the AMHTS center are the following: 1) general history, containing a personal and family medical history, basic demographic data, and a systemic symptom review; 2) glucose challenge test; 3) chest X ray; 4) anthropometry; 5) urinalysis; 6) electrocardiograms and vector cardiograms; 7) blood pressure; 8) cervical Pap smear, as appropriate; 9) audiometry; 10) spirometry; 11) visual acuity, phoria, depth perception, and color vision; 12) tonometry and visual fields; 13) blood chemical profile; and 14) hematology.

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This study was supported in part by Regional Medical Program grant PHS-RM-0024-92C and by grant 01/3210.1/69.01 from the Veterans Administration.

The authors would like to thank Drs. John Thornby and Carolyn J. Hursch for their assistance.

PSYCHIATRIC TESTS

In addition to these tests and procedures, we are also examining the utility of a battery of psychiatric screening instruments that draws heavily upon previous work by Holmes and Rahe (3), Leighton and associates (4), and members of the department of psychiatry at the University of Florida College of Medicine (5).

The results of all the psychiatric tests are being examined independently as well as together in a single psychiatric scale.

Modified Leighton Scale

The first list of questions under study was taken largely from the Leighton test (4). It deals primarily with psychiatric symptoms and was pretested at the University of Florida on a local population (5). The questions follow:

Do you have any physical or health problems at present?
Have you ever used any medicine or tranquilizers for your nerves or to help you sleep?
Do you feel in good spirits?
Are you bothered by your heart beating hard?
Are you bothered by nervousness?
Are you bothered by nightmares?
Do you have trouble getting to sleep or staying asleep?
Do you feel tired in the morning?
Do you tend to lose weight when worrying?
Are you bothered by cold sweats?
Have you ever felt you were going to have a nervous breakdown?
Have there been times when you felt low or hopeless?
Do you have spells of dizziness or fainting?
Do you have frequent headaches?

Kubie [3]) is that the most effective and powerful way to learn about human suffering is to listen to a person and to struggle with him in discovering and resolving his needs and difficulties. To omit, shortchange, or compromise this aspect of any mental health trainee's growth invites the deterioration of our capacity to respond therapeutically in any context.

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THE NONACTIVIST POSTURE

Parallel stresses are placed on trainees who maintain a major commitment to a relatively less active posture in their work. A tendency toward extravagant self-criticism seems to occur frequently. In the context of others who seem so certain of their purpose, this attitude may be felt as weakness and indecisiveness and may be threatening to the trainee's forming sense of direction and purposiveness. Beyond this, the trainee may feel that such doubts represent his failure to be in tune with the times and to hold fast to worthwhile goals when others appear to be pursuing them with vigor and determination. Issues of morality and politics, of injustice and misplaced investment come to predominate. In the extreme, one's sense of himself and his basic worth becomes shrouded with guilt and an uneasy feeling that he is trying to learn something both right and wrong—a good thing, perhaps, but not the right good thing or not enough of it. Following is a poignant example of the type of dilemma that these trainees may face: A black patient who is deeply committed to therapy tells his white therapist that their next session coincides with a street-sweeping drive in his ghetto neighborhood and that if they are to meet, the therapist will have to join him. To say "no" to such a request augments the young therapist's questions about the depth of his social values, as well as the genuineness of his commitment to therapy, for apparently both could be served only by joining his patient in the street.

An attitude of defensiveness, never the companion of clear thinking, often arises with these trainees' being left in an obsessional morass from which the only escape seems to be a more totalistic self-definition through painfully ambivalent surrender in one direction or the other. Even if the trainee does not surrender, an electrified atmosphere attributes undue significance to anything he does or says. Participation in a certain conference is read as a sign of a trainee's switching camps and allegiances. A trainee who, due to incidental circumstances, temporarily interrupts his analytic training is openly hailed by many of his colleagues for having finally seen the "light." One can imagine the sense of strain and confusion the hero of such celebrations undergoes.

When, as a part of this process, a rigid commitment is made to more reflective therapeutic modes, the content of allegiances may differ but not the quality of a totalistic definition. A caricatured psychoanalytic posture is adopted (2). Reflection is replaced by resolute detachment, relative inactivity by unresponsiveness, and empathy by impersonal "understanding." The trainee, in short, becomes inhuman and tends to regard his patients in a similar light. Currently, while some trainees are inclined toward or defensively assume such a posture, the fact that the social and professional pressures to be this way are less insistent (in contrast to the activist position) probably accounts for the relative infrequency of this type of rigid professional definition. More often, in such trainees, a sense of professional isolation mirrors a sense of personal isolation and of being cut off from the main stream. Honest self-scrutiny and doubt cannot be openly voiced without the risk of yielding to pressure to change one's position or else of publicly discrediting one's self-worth and therapeutic stance. Yet our contention is that although some trainees may pay a price for being out-of-date, still higher dues are paid by those trainees who commit themselves to being fashionable activists.

CHOOSING SIDES

Each of these positions, when polarized, is weakened and rendered the less by rigidly excluding the other. While the situation might have been reversed in the past, it seems to us that now the activist position tends to be defined primarily in opposition to and in defense against the less active position. Striking splits also occur within the teaching staff and leave trainees with few, if any, role models for the successful integration of both points of view. In fact, staff splits tend to offer social and group support for "taking sides." A sense of the complementary roles of individually oriented psychotherapy and broader-scale community intervention seems to be lacking. Instead they are seen as competing, often in a very real sense given limited training funds and trainees' limited time for performing service.

To illustrate, a group of trainees initiated a seminar in radical psychiatry to coincide in time with a more traditional therapy seminar. All trainees were thus forced to make an unambiguous choice between the two. Within such a context, the trainee is limited in his freedom to evaluate critically and fairly his own and alternative postures. Peaceful coexistence, even when maintained by many trainees, covers a highly inflammatory situation in which few opportunities are lost (often by staff) for vehemently defending one stance while covertly or overtly disparaging the other. Interventionists are seen as deluded saviors with chips on their shoulders, while reflectively oriented psychotherapists are seen as reactionary bigots. Trainees are stuck with the disastrous alternative of having to choose sides or to resolve issues on their own. The learning and personal growth essential to the development of a therapist of whatever inclination cannot occur where internal and external pressures toward preemptive ideological commitment to one mode or the other exist in raw form.

Our bias as professionals committed to a reflective therapeutic modality cannot help but influence our perceptions of current training issues and our thoughts about what to do. Still, two observations seem relatively independent of our particular bias. When trainees, by virtue of a confluence of their own needs and certain professional pressures, are placed in the position of "buying" an ideological or theoretical point of view, learning and growth suffer. Imaginativeness and the exploration, as well as the acquisition, of skills can be severely obstructed in a value-saturated, heavily politicized atmosphere. Sharing therapeutic experience as a way of teaching and learning can flourish only when such pressures are removed and nonjudgmental acceptance prevails instead. Our second observation (elaborated by

abandon psychotherapy as a relevant activity and to pursue the narcissistic goal in some other clinical area.

This type of resolution is of interest to us since it seems to be closely tied in with the current trends in mental health thinking we have described. Considerable stress is placed upon the trainee therapist by the readily available alternative of joining the ranks of community activists—a stress felt all the more keenly because such activities are fashionable and represent the implementation of ideas whose time is long overdue. Part of the motivation for joining ranks may lie in the (fantasied) hope of realizing within this realm the frustrated wish to be curative and an (infallible) agent of change. Rather than accepting the limiting implications of one's experience, one turns, with redoubled hopes and wishes, to new fields of endeavor where he hopes to ultimately reach the narcissistic goal.

THE ACTIVIST POSTURE

The danger here has been best expressed by Erikson's (7) notion of "wholeness" and "totality" in identity formation. Wholeness is flexible, permeable, and naturally integrated; totality, on the other hand, involves a rigid definition of self and others, a delineation of the self by uncritically embracing some ideas and identity patterns and sharply excluding others. Erikson further pointed out that totalistic identity patterns are most likely to emerge in periods of social uprootedness or, to extend this idea, in periods of rapid and discontinuous social change. When the social ground upon which one stands is shifting and lurching, one must turn inward and create, often artificially, stable boundaries and self-definitions. A disdainful attitude toward old techniques, values, and experience, although perhaps having a certain innovative value, may lock one into a way of thinking such that he uncritically disregards anything that smacks of the old and uncritically champions whatever might be new.

In this context trainees who become committed to community activity as a mode of intervention may form a more totalistic style of identity, which is best summarized by Eldridge Cleaver's remark (often referred to by community interventionists), "If you're not part of the solution, you're part of the problem." A brief catalog of what tends to be included within the boundaries of the activist approach might be: 1) a premium placed on active intervention and a belief in the efficacy of action; 2) concern for the social causes of patients' distress; 3) a highly partisan, perhaps romantic, empathy for the patient as victim (8); 4) emphasis on the politics, as opposed to the psychodynamics, of therapeutic intervention (9); and 5) disdain of hierarchies, status, and differential skills of professionals. For example, one trainee's therapeutic work with a black patient went seriously awry because the therapist was more interested in the patient's experience as a black man than his obvious depressive difficulties. In numerous instances we have seen trainees view and respond to minority group membership as the core psychological problem, the patient's declarations to the contrary notwithstanding. Active intervention (doing something "real" to or for the patient) is seen as maximally suited to deal with such problems and is elevated from the status of an expedient therapeutic mode to an overriding principle. A regard for finer, more subtle psychodynamic issues is dismissed as fanciful and unrealistic.

In addition, there is a cogwheeling of the styles of trainees who adopt this approach and of the style of operations (if one can describe it as such) inherent in this widely shared point of view. The failure of one plan of action seems to be regarded as a limitation in the breadth and scope of the intervention and as cause for more elaborate plans: If a certain amount of activity seems ineffective, double that amount should be more effective. To provide theory and logic to this approach, psychiatric illness in itself is denied and replaced by notions of social ills. Once these are righted, patienthood will somehow disappear. A social gathering in which patients meet staff members on equal grounds and often manage to outdo them in various activities is regarded as absolutely valid proof for this ideological theory. Questioning the basic assumptions or doubting the essential "rightness" of the ideology of active intervention tends to be heard as tantamount to heresy. An apparent air of idealism, warmth, cooperation, and mutual support makes the ranks of the community people so much more attractive than the isolation, authoritarian inequality, and the resultant sense of impotence one imagines finding among the traditional professionals.

Feelings are to be shared, not to be used as data, and the resultant gratification from mutual give and take is justified by egalitarian principles rather than by therapeutic efficacy. While imbued with such fervor, younger professionals rarely adopt the point of view held by an older expert who thinks of his long-standing professional interventions in community affairs primarily as lessons in humility. Challenges from within the ranks rarely arise, and those from without may be brushed aside as coming from the unenlightened. Instant expertise by virtue of declaring one's convictions is possible because essentially no one knows more than anyone else about the task of expanding mental health services beyond their traditional boundaries. In other words, considerable external support exists for assuming a stance that is, in part, a defensive effort by the trainee to quell doubts about his therapeutic efficacy through a commitment to action.

While this configuration does not describe any given individual, we contend that it does reflect a totalistic identity pattern toward which some mental health trainees are both pushed and inclined. Such a definition of one's professional position clearly has detrimental effects. By replacing the learning process with one of ideological commitment, the trainee forecloses on his options to reexamine and readjust what he is doing. More importantly, we fear, it invites the disillusionment, scorn, and fury of those nonprofessionals and clients who trust the professional's implicit promise to be the agent of change.

This quotation provides some indication of the massive change in perspective that is often required of the progressive mental health worker. It is as if the muted social and political backdrop against which one engages in psychotherapy were suddenly and dramatically highlighted, challenging him to completely rethink his assumptions about the context he operates within. The atmosphere in which this shift occurs, however, often makes it a stultifying experience. Intense social and professional pressures create a climate, not of open discussion and rapprochement, but rather of confrontation, of missionaries struggling to enlighten primitives. In our experience it happens not infrequently that one's questions and doubts about interventionist tactics and ideological assumptions are treated not as a difference of opinion but instead as ignorance, bigotry, and social atavism. While such an attitude may characterize only the more radical proponents of community activity, it pervades the entire atmosphere within which one teaches and trains, and therefore trainees have no choice but to deal with it.

Within this framework two apparently mutually exclusive alternatives are left open to trainees: being a "good" human being (progressive, concerned, involved in remedying social injustices, and providing the most service to the greatest number of clients) or being a "good" psychotherapist (impartial, reflective, inactive, and spending a relatively great amount of time with a limited number of patients). The dilemma is undoubtedly aggravated by the fashionable quality of the first alternative and the outdated quality of the second. In short, it becomes nearly impossible to maintain the view that what one does professionally need not directly reflect one's social values or commitment to them. A sense of professional worthwhileness, then, comes to be tied more closely to a social or political point of view and to the fervor of one's adherence to that view than to actual competence and skill.

THE WISH TO "CURE"

Much has been written about the development of the professional identity of the psychotherapist, the crises that have to be overcome, and the resolutions adapted that are particular to this field (2, 3). As Kubie has described, and as anyone who has gone through the process can attest, becoming a therapist involves much more than just the accumulation of relevant information or the mastery of certain techniques. It is a living and growing experience, accomplished more by soul searching than by acquiring information. In this section we hope to describe some troublesome aspects of this growth process for the current generation of mental health trainees.

A crucial aspect of becoming a psychotherapist is the positive acceptance of one's finite and fallible means for effecting change in patients. This accounts for what Kubie (3) described as "an ill-defined sense of mourning and a weariness of the spirit" often seen in experienced psychotherapists. The freedom to see oneself as being no different than other human beings in what one tries to do for a living may be limited by the special motivation of anyone who begins training as a therapist. The fantasy that he has or should have special talents as a curative agent is a natural part of the desire to become a therapist. Whether this fantasy stems from the prospective therapist's wish to provide for others the care and grace of understanding he feels to have been denied himself—the wish, as Erikson (4) has suggested, to cure one's mother and thereby oneself or the wish to counter hostile and destructive forces in himself—the manifest wish is to effect change, to make better, to cure.

It is not surprising that this fantasy often goes beyond mere interest in acquiring professional skills and extends into political and social action. Freud's "rescue" of the banished and deviant hysteric could be seen in the same light. Understanding and accepting deviance in the guise of a medical model of treatment replaced an earlier, essentially penal one. Recently, the rediscovery of the influential power of group relationships (emerging from studies in group dynamics, milieu therapy, and sociotherapy) has rekindled and resonated with inner wishes for omnipotence and curative powers, so as to make far-reaching social and political goals seem more within reach than they really are.

The therapist's wish to cure and change invariably carries considerable narcissistic investment. To fail with a patient is seen as both a personal and professional shortcoming. The frequently expressed belief that it is not so much what one does or learns to do as a therapist but the kind of person one is (e.g., the warmth, intuition, sensitivity, and spontaneity he possesses) marks an equation between professional competence and personal worth and self-esteem.

That young psychotherapists experience their fallibility with considerable trepidation and call forth defensive protection has been clearly described by Sharaf and Levinson (5), who referred to the activation of a "compensatory defense of feeling omnipotent." While compensatory omnipotence may overstate what we are describing here, the sense of exasperation at stubborn, resistant patients that is often seen in young therapists suggests that to modify the hope of fulfilling one's wish to cure will be experienced as a deep narcissistic wound, which entails giving up a significantly regarded view of oneself. The bitter and important fact that the amount of activity the therapist engages in bears little relationship to the amount a patient changes adds insult to narcissistic injury: one cannot become a more effective therapist simply by trying harder. In fact, bearing down often produces paradoxical results, particularly with more disturbed patients.

Bibring's formulation of depression (6) is relevant here. Essentially, Bibring described depression as the perception of a disparity between narcissistically invested goals (ego-ideal) and the actual ego resources for achieving such goals. The narcissistically invested goal we have described is the wish to be curative with patients. The inevitable limitation of any therapist to accomplish this goal results in the perception of the disparity that Bibring has schematized. One way out of this dilemma is to

Current Strains for Mental Health Trainees

BY C. BROOKS BRENNEIS, PH.D., AND DORI LAUB, M.D.

Mental health trainees are currently troubled by conflicts between the "new" radical psychiatry and "old" professionalism. The conflict has been shaded with social and political overtones such that trainees view their worth as professionals not in terms of their skill, but rather in terms of how involved they are in the social and political arena. The authors feel that as a result, trainees have difficulty accepting their fallibility, tend to attribute psychiatric illness to social ills, and deal with their doubts about their therapeutic efficacy by committing themselves to action rather than to reflection.

WITH THE INCREASED emphasis on community psychiatry and community mental health—concepts that have as many definitions as potentialities—and with the more recent advent of "radical psychiatry," new problems face the developing mental health professional. We shall attempt to focus upon some of these issues as they are reflected in the inner struggle of trainees engaged in forming their professional self-images.

Whether correct or not, the term "community mental health" as used in recent years carries with it a connotation of activity. This activity has a direction implicitly derived from ideals: the rectification of current and long-standing social ills and injustices. To the extent that one becomes engaged in the struggle for social change, as leader or participant, and becomes, a priori, committed to a certain course of intervention, he loses his freedom to form a private (asocial) contract with an individual client and often secondarily redefines the situation in such a way that the treatment of an individual patient plays no significant role.

THE CURRENT CONFLICT

Yet, confusion and muddle about whether the client is an individual, an entire community, or some specific subgroup in the community, although important, is not in our opinion a major source of strain in trainees' experience. A more basic problem facing the trainee is reflected in a professional dichotomy about how to intervene regardless of how the client is defined. In community psychiatry, as reflected most sharply in the radical approach, the goal of intervention is to ensure a relatively immediate and effective response to the needs of an individual or community in distress. Individual psychotherapy strives more toward expanded awareness, understanding, and control of oneself and of his life situation. The interests and activities of the therapist, as well as those encouraged in the patient, vary accordingly. Interest in the strategies and tactics of power, especially through the organization of groups within the community, becomes central to community psychiatry. Partisanship, decisiveness, and polarization are, in this context, adaptive and therefore stand in high esteem. In contrast, reflection, delay, and a capacity for sustaining ambiguity and self-scrutiny are more adaptive and thus highly, if not exclusively, valued in individual psychiatry.

There is nothing startlingly new in this; rather, it is an updated version of a much older conflict that most generally exists between action and reflection, between the prizing of outer events and realities and inner events and realities. What is different and new on the current scene, often increasing the wear and tear on trainees to an insufferable degree and creating chasms that cannot be breached with any measure of comfort and balanced discourse, is that this venerable controversy has become strongly colored by insistent political and social values. Although arguments may have the appearance of being discussions of technical issues (that is, of the appropriate method of intervention), basically what is at stake and what makes differences of opinion so shrilly voiced are highly charged ideological attitudes and beliefs, i.e., "old" professionalism versus "new" humanism. A presumably reactionary and stratified view of society, which allows for hierarchies of different kinds, is pitted against a utopian, egalitarian, unifying one. In its extreme form an axiomatic, ideological position is taken that views traditional methods of intervention as exploitative, repressive, and essentially corrupt. To quote Goldmacher:

> The radical recognizes that psychiatry in free enterprise America has chosen to view human beings in a very narrow context, namely the intrapsychic, and to some extent interpersonal.... This way of looking at people is an explicit way of supporting an exploitative system which wants very much for people to see themselves as individuals.... By keeping people separated, the system maintains its power, and simultaneously generates feelings of powerlessness among the populace (1, p. 668).

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role in the future may largely be that of an interested bystander who receives occasional requests from colleagues in obstetrics to evaluate possible psychiatric contraindications to the performance of a therapeutic abortion. It is thus important for us to have such data available as have been reported in this study.

Even though the patients with prior histories of mild psychiatric disorders showed a trend (although not statistically significant) to experience slightly more emotional symptoms following the abortion, it is clear that the vast majority of them were satisfied with the decision that was made. Thus it appears that they did not regard their emotional state following the abortion as a significant price to pay for the benefit they obtained, and in fact 96 percent felt that their emotional health was as good as or better than before.

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TABLE 3
*Reaction to the Abortion, in Percentages**

Reaction	Psychiatric Group (N = 52)	Nonpsychiatric Group (N = 74)
Relieved	50	54
Very glad	37	42
Glad	12	11
Regretful	12	5
Neutral	8	7
Unhappy	4	2
Guilty	2	4

* Percentages total more than 100 because some subjects felt relieved and glad.

psychiatrist tended to recommend some follow-up psychiatric care for this group.

All respondents were asked if, under the same circumstances, they would make the same decision to seek abortion. Their replies are shown in table 2. No significant differences existed; the large majority of both groups indicated that they would undergo the same procedure again, if necessary. The fact that the psychiatric group reported more indecision may reflect its greater incidence of post-abortion symptoms or some neurotic problems about making decisions.

Patients were asked to check a list of feelings about having had the operation (table 3). The most common response was relief. While the psychiatric group was more likely to report regret, the difference between the two groups is not statistically significant.

Only 19 percent of the psychiatric group and 23 percent of the nonpsychiatric group felt that the necessity of talking with a psychiatrist was a good requirement. The rest either felt that the interview was unnecessary or expressed no opinion.

The women were asked how they would respond if a friend asked if she should have a therapeutic abortion. Only two percent and four percent, respectively, of our psychiatric and nonpsychiatric groups said that they would discourage their friend.

Pion and associates (6) have suggested that a woman's reaction to hospital personnel reflects her attitudes toward the abortion itself. They said, "Those who were not able to resolve their abortion were also dissatisfied with the services." We have scrutinized our patients' negative comments about hospital personnel in table 4. It appears that dissatisfaction was low and did not differ significantly between the two groups. Thus, if Pion and associates are correct, our psychiatric patients had no greater problems in adjusting to the abortion.

DISCUSSION AND CONCLUSIONS

If a therapeutic abortion is a significantly traumatic experience for a woman, we might expect to find evidence of a greater degree of emotional reactions in particularly vulnerable patients—those with a prior psychiatric history. Our failure to demonstrate a series of significantly different emotional reactions between the two groups suggests that women without gross current psychiatric illnesses can usually take the procedure in stride. All of the abortions were performed under legally approved hospital conditions. Even so, some public and medical attitudes that stigmatize abortion apparently made it necessary for some of our patients to avoid risking exposure by participating in our survey. Such attitudes are probably a significant cause of the guilt feelings the patients reported. It seems likely that the furtive or illegal abortions of a previous era contributed to the alleged emotional sequelae of abortions.

Our nonpsychiatric patients appear to have responded very well to the removal of the stress of their pregnancy. One similar study (7) contains follow-up data on 250 American women who received therapeutic abortions and who were essentially healthy except with regard to the stress of their current pregnancy. They, too, experienced few psychological difficulties. Our psychiatric group tended to report more emotional symptoms, but a previous study (5) showed that these symptoms were transient and significantly diminished seven months and longer following the procedure. It should also be noted that our selection process for the psychiatric group specifically chose women with a tendency to have and to report emotional symptoms.

In a recent report Ford and associates (8) discussed women with moderate to severe psychiatric problems. They said, "It would appear that the more serious the psychiatric diagnosis, the less beneficial was the abortion. Extending this reasoning, it would seem that relatively 'normal' women might benefit more from abortion. . . ." Our study confirms this conclusion. If this procedure is done on the request of the woman herself and under good legal and medical conditions, the occurrence of emotional symptoms seems to be minimal and diminishes with the passage of time even in a particularly vulnerable group of patients.

This information is particularly relevant as psychosocial indications for abortions begin to be accepted more and more. Many people anticipate that abortion on request will become more available. The psychiatrist's

TABLE 4
Percentage Who Found Overall Treatment by Hospital Personnel Unsatisfactory

Category	Psychiatric Group (N = 52)	Nonpsychiatric Group (N = 74)
Secretaries	4	—
Admission officers	2	6
Nurses and aides	6	8
Medical staff		
gynecologists	—	4
Psychiatrists	—	1
Other physicians	—	1
Other personnel	2	3

TABLE 1
Percentage of Psychiatric and Nonpsychiatric Groups Reporting Emotional Symptoms Following Abortion

Symptom	Psychiatric Group (N = 52)	Nonpsychiatric Group (N = 74)
Depression	19	8
Crying spells	12	7
Anxiety	13	8
Sleeplessness*	15	4
Worry	15	7
Guilt	10	3

* $p \leq .05$.

had a therapeutic abortion on the recommendation of one of the four psychiatrists collaborating in this study. Each subject was asked if she would return a card giving confirmation of her present address and indicating her willingness to answer a mailed questionnaire. Nineteen of our letters did not reach the addressee and were returned. There were probably others that were also undeliverable, for we believe that some women gave a false name or address. In other instances unmarried women apparently did not wish to risk exposure and thus did not reply. Our first inquiry letter and enclosed card were so worded as to offer no clues to an unauthorized reader; however, the questionnaire that we wanted permission to send was obviously going to raise specific questions and might threaten confidentiality for some women.

A total of 157 women responded favorably by returning the card, and three others wrote asking us not to send the questionnaire. In addition to mailing 157 questionnaires, we gave 19 to women at the time of the pre-abortion interview, asking them to respond several weeks after the abortion had been performed. Of a possible total of 176, we received 126 completed questionnaires (72 percent) in time for this study.

It should be noted that a history of prior psychiatric illness was not a requirement for abortion, since the psychiatrists involved tended to evaluate the patients largely in terms of their reaction to their present pregnancy. However, of the 126 patients who responded, 52 had given a history of prior psychiatric illness at the time of the evaluation interview. None was seen as currently suffering, or having ever suffered, from a major psychiatric illness. In this group (to be called the psychiatric group) we have placed all of those with a history of an emotional disturbance at any time of life except in relation to the unwanted pregnancy. These emotional disturbances include anxiety symptoms, attacks of depression, problems with insomnia, and a variety of psychophysiologic disturbances for which medical and/or psychiatric treatment was obtained. Of course, it is to be hoped that extensive, successful prior psychotherapy would reduce an increased vulnerability to emotional stress, but none of these women gave a history of such treatment. Our contrast group, the nonpsychiatric group, contains women with no prior history suggestive of particular emotional vulnerability to stressful experiences.

By comparing these two groups we believe that any emotional impact of the therapeutic abortion will be most effectively shown, since in one group we are scrutinizing emotional effects in presumably vulnerable individuals, whereas the others are probably less vulnerable. In this paper we have selected for comparison only those questionnaire responses which specifically illustrate the emotional effects of a therapeutic abortion. A detailed report of other effects is in preparation for presentation elsewhere.

RESULTS

The study group consisted of black and white women from all socioeconomic levels. The subjects ranged in age from 15 to 41 years. The psychiatric group, with a mean age of 25.2 years, was significantly older ($p<.01$) than the nonpsychiatric group, which had a mean age of 22.5 years. Although there were more married and divorced women in the psychiatric group, the differences between the two groups in marital status were not statistically significant.

Our questionnaire probed several aspects of the post-abortion health of the respondents. All of the psychiatric group and 96 percent of the nonpsychiatric group reported that their general health was better or normal. Ninety-six percent and 92 percent, respectively, said that their emotional health was better or normal.

A checklist invited respondents to report on emotional symptoms that had occurred since the abortion; answers are shown in table 1. Here a distinct trend appears in that the psychiatric patients more frequently listed the presence of emotional symptoms. However, the prevalence rate is not high, and the only significant difference between the two groups appeared in the symptom of sleeplessness.

The occurrence of illnesses since the abortion was evaluated by a section in which the women recorded their personal histories. The incidence of illness was low, and no significant differences could be detected.

All patients were asked if they had had psychological or psychiatric care since the abortion. Twelve percent of the psychiatric group reported such treatment, as opposed to three percent of the nonpsychiatric group. It is not surprising to see a trend for more treatment in the patients with a psychiatric history since the evaluating

TABLE 2
Percentage of Psychiatric and Nonpsychiatric Groups Who Would Again Choose Abortion

Response	Psychiatric Group (N = 52)	Nonpsychiatric Group (N = 74)
Would have abortion	82	92
Would not have abortion	6	3
Undecided	12	5

Therapeutic Abortion and a Prior Psychiatric History

BY JOHN A. EWING, M.D., D.P.M., AND BEATRICE A. ROUSE, M.ED.

A follow-up study of 126 women who received abortions on psychiatric grounds revealed that the 52 women with a history of prior psychiatric illness did not experience significantly more post-abortion emotional reactions than the others. Ninety-six percent of the psychiatric group and 92 percent of the others reported that their emotional health was better or normal afterward.

WHERE AND WHEN stringent laws have existed against therapeutic abortion, this procedure has usually been permitted only when the life of the mother was threatened. From the psychiatric point of view this usually meant a severe current psychiatric illness, often manifested in convincing suicidal attempts, or a prior history of severe psychiatric illness associated with pregnancy or child rearing. Some authors (1) have pointed to the fact that under such legal conditions the women who were selected as candidates for a therapeutic abortion tended to be the ones least likely to respond favorably to it. Their vulnerability to stress had already been demonstrated, and the psychiatrist had to weigh the relative stressfulness of continuing the pregnancy versus its termination. In either case the possibility of undesirable emotional reactions seemed considerable. At the other end of the spectrum, it has been reported that therapeutic abortion produces minimal or no emotional impact in women with no history of emotional disturbance (2).

In recent years legal changes regarding abortion have appeared with increasing rapidity in the United States and elsewhere, and abortion is becoming more and more a medically and legally approved procedure. Today's women less frequently must subject themselves to abortion under furtive, illegal, and emotionally distressing circumstances. Even so, adverse reactions may be inevitable. Peck and Marcus (3) reported some depressive symptomatology in 20 percent of the women given abortions for psychiatric reasons, in contrast to those whose abortions were performed because of rubella. Patt and associates (2) have concluded that aborted women may undergo a mourning process which coincides with the length of the expected pregnancy and produces some symptoms.

In this report we are comparing the overall reactions to therapeutic abortion in women who have a history of previous psychiatric illness with those who do not. This is an important area to scrutinize if we are to learn more about the natural history of therapeutic abortions and if psychiatrists are to be able to give informed opinions as to whether these abortions are indicated or contraindicated in specific instances.

METHOD

Detailed records were kept on patients applying to the North Carolina Memorial Hospital for therapeutic abortion on psychiatric grounds under the 1967 North Carolina amendments to the abortion law. Since these legal changes were made it has become necessary to certify only that continuance of the pregnancy threatens the health of the woman. In the vast majority of cases, in the absence of clear medical, surgical, or obstetrical contraindications to the pregnancy, such patients have been referred to psychiatrists for evaluation.

To the psychiatrist health is a holistic concept that comprises a woman's total emotional state, including her plans for the future, interpersonal relationships, self-concepts, and often her socioeconomic status. Indeed, in a previous study (4) of 207 women applying for therapeutic abortion, the most frequently cited ground for recommending the operation was the presence of some degree of depression; transient situational disturbance was the diagnosis in 41 percent of the women. It appears that most psychiatrists would prefer that abortion be available on demand. This is confirmed by polls, as we have demonstrated in an earlier paper (5). Meanwhile, some psychiatrists have continued to evaluate women for abortion and to provide the necessary certification while waiting for further legal progress.

From 1970 to 1971 we collected detailed questionnaire responses from many of the subjects from within a few weeks to two years after their abortions.

We sent letters to 301 women who were known to have

Revised version of a paper presented at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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The follow-up study was supported in part by the Carolina Population Center, Chapel Hill, N.C., through the efforts of Drs. E. Kessel, J. Hulka, and M.W. Freymann.

The authors wish to acknowledge the assistance of Dr. Charles Hendricks, Chairman, Department of Obstetrics, University of North Carolina, and his staff; and the collaboration of Drs. Myron B. Liptzin, Roger F. Spencer, and David S. Werman.

patient: severe suicidal threats or attempts, a deteriorating social situation, or severe acting out with involvements with the law are typical examples. Under these circumstances, short-term hospitalization with active intervention along the lines mentioned by Dr. Adler may transform a failing into a successful long-range psychotherapeutic treatment.

There are some borderline patients who need long-term hospitalization as a crucial aspect of their treatment. The Psychotherapy Research Project of the Menninger Foundation found evidence that some borderline patients with particularly low motivation for treatment, severe ego weakness (manifested by lack of anxiety tolerance and impulse control), and particularly poor object relationships require an expressive psychotherapeutic approach with minimal limit setting or "structuralization" in the treatment hours and concomitant hospitalization with clear-cut limit setting and structuralization of the hospital experience. Patients treated with this approach achieved a high level of improvement, in contrast to patients with the same characteristics who were submitted to supportive psychotherapy (with limit setting and structuralization within the treatment hours) without hospital treatment of the kind mentioned.

In many cases, of course, a combined treatment approach such as the one I am proposing can be achieved without full hospitalization: partial hospitalization and/or other extramural or aftercare services can be provided, or the family can be supported to sustain the necessary limit setting. In general terms, the more severe the acting-out potential, the tendency to negative therapeutic reactions, or the suicidal or generally self-destructive trends, and the lower the patient's capacity for meaningful object relations, the more advantageous is an extended period of hospitalization concomitant with intensive psychotherapy. In our own hospital we have become increasingly optimistic about a treatment approach that combines extended hospital treatment with intensive, long-term expressive psychotherapy.

A pre-admission home visit evaluation led to the decision that this woman had a severe regressive potential at that point: she wanted a rest and wished to reject her children and boyfriend. Before admitting her the staff discussed with her a one-week inpatient stay, with later day hospitalization if necessary.

From the beginning the psychiatric resident and the rest of the staff attempted to clarify the problem this woman had in wanting so much, being disappointed, and in her fury self-destructively messing up her life. In spite of our discussing these issues with her and anticipating their recurrence on our unit, the patient became increasingly demanding, angry, and suicidal. While she was at home during a weekend after her first week of day hospitalization, she called the unit, stating that she was about to take a large overdose of a drug. The resident on call became angry with her when she refused to come back to the hospital; he thought of calling the police and discharging her to a state hospital. But in spite of his anger, he and a case aide made an emergency home visit.

In this home visit the two staff members felt they could not form an alliance with the patient to contain her self-destructive behavior; they sent her to the state hospital after telling her that the unit wanted her back but only after she could work out with the staff ways to put her feelings into words without acting on them self-destructively. A week later she arranged to see her therapist and negotiated an agreement to return to the unit as a day hospital patient. Although the six weeks of day hospitalization that followed were not tranquil, the limit setting and renegotiation were successful in establishing a working relationship with the unit.

CONCLUSIONS

The successful limiting of a patient's regression—in this case, self-destructive acting out—allows the patient and staff the opportunity to do the work it agreed upon: to explore in a safe setting some of the issues that brought the patient to the hospital and to clarify some of the patterns that the patient could not recognize before.

The essence of the treatment experience for borderline patients has been described by Winnicott (12) as one in which the patient has to learn that he cannot destroy the object or be destroyed by it, no matter how much he may wish this or fear it. The psychiatric unit that can struggle with its own retaliatory fury with such patients and can learn the value of nonpunitive limit setting is in a position to offer this kind of experience. The fact that these patients are expert in provoking the abandonment and destruction they fear places a burden on the staff that attempts to offer good treatment. The staff's response to the challenge of these patients determines whether they can offer the patients a new kind of experience or only a reconfirmation of the projections they are so expert in eliciting from people involved with them.

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DISCUSSION

OTTO F. KERNBERG, M.D. (Topeka, Kans.)—Dr. Adler describes the characteristics of borderline patients derived from their predominant primitive defensive operations (splitting and primitive forms of projection—particularly projective identification, devaluation, etc.) and the effects of these primitive mechanisms and conflicts on the patients' hospital experience. These patients distort the interpersonal situation in terms of their intrapsychic conflicts, activate latent conflicts among staff, and contribute to inducing a temporary regression in the group processes—an important modality in short-term treatment units. Dr. Adler stresses the danger of permitting unchallenged regression to occur to such an extent that the acting out of conflicts within the hospital setting perpetuates the patient's gratification of pathological primitive needs. Dr. Adler also stresses the danger of excessive limit setting that obscures the patient's psychopathology. I agree with these points, and it seems to me that a clear structuring of the patient's experience on the unit and a systematic interpretation by the treatment team of the patient's behavior in the "here and now" are crucial aspects of the treatment of borderline patients.

What are the indications for the hospitalization of borderline patients, and what can be expected from short-term and long-term hospital treatment of them? Although a brief discussion does not permit full exploration of these questions, the following are some of the major diagnostic and therapeutic indications for short-term and long-term hospitalization.

Short-term hospitalization is indicated when the psychotic episodes that borderline patients may experience under excessive emotional turmoil, under the effect of drugs or alcohol, or in the course of a transference psychosis cannot be resolved within an outpatient psychotherapeutic setting alone. A well-structured hospital milieu program, clarification of immediate reality, and a combination of an interpretive psychotherapeutic and yet limit-setting milieu approach may resolve such temporary regression of borderline patients within a few days to a few weeks. Brief hospitalization is also indicated for those borderline patients whose chaotic life situation and incapacity to provide meaningful information to the psychotherapist make the diagnostic process itself (particularly distinguishing the condition from schizophrenia) extremely difficult and consequently hamper the planning of treatment. Short-term hospitalization is also indicated when acute life-threatening or other crises have potentially damaging long-range consequences for the

for the quarry. Not until the victim becomes aware of danger and tries to make a break will the chimpanzees on the ground leave their positions and converge on the fleeing baboon.

Meat is a delicacy for chimpanzees, and normally a great deal of excited calling accompanies the successful capture of prey. This attracts the attention of any other chimpanzees in the vicinity and they typically converge upon the hunters and cluster around, either watching intently or actually begging from the chimpanzees who have acquired shares of the carcass. When begging, a chimpanzee may hold his hand to the mouth of an eating individual in the hope that he will be given the remains of the mouthful (see figure 3), or he may hold out his hand toward the other, palm up, in the typical begging gesture of man.

Often begging behavior is rewarded. This is significant since food sharing among adults has not been recorded in any other nonhuman primate in the wild. After chewing for a while on a mouthful of meat and leaves (leaves are almost always eaten with meat) a chimpanzee will nearly always allow a begging individual to take it. Sometimes he will permit others to chew on the carcass at the same time as himself, or let them detach pieces for themselves. Occasionally he will actually tear off a piece himself and hand it to the one who is begging (6, 24, 25).

Tool Using and Tool Making

With respect to his tool-using behavior, the chimpanzee comes considerably closer to man than does any other living primate. Tool using in animals has always fascinated people because, for many years, man was typically referred to as *the* tool-using animal. A variety of animals (including invertebrates) do use objects as tools if we define tool using as "the use of an external object as a functional extension of mouth or beak, hand or claw, in the attainment of an immediate goal" (10). It should be emphasized, however, that tool-using ability in itself does not necessarily indicate any special kind of intelligence. The Galapagos woodpecker finch uses a cactus spine to probe insects from crevices in the bark. This is fascinating behavior, but it does not make this bird more intelligent than the ordinary woodpecker, which uses its long beak and tongue for the same purpose. The Galapagos finch employs a behavioral adaptation, the woodpecker a morphological one.

The point at which tool using in a nonhuman animal acquires significance, when viewed in relation to the evolution of tool use in man, is when a species or an individual within that species can adapt its ability to manipulate objects to a wide variety of purposes and, in particular, when it can use an object spontaneously to solve a completely novel problem. The chimpanzee has shown itself capable of using a wide variety of objects for a wide variety of purposes, both in the wild and in captivity. Moreover, if an object is not suitable for the specific purpose for which it is to be used, the chimpanzee will modify it accordingly, so that he may be said to show at least the beginnings of tool-making behavior.

Our research at Gombe has shown that one community of chimpanzees uses four different kinds of objects—grasses, sticks, leaves, and rocks—in a wide variety of different contexts. Sticks are used to plunge into ant or bee nests during feeding and occasionally as levers to enlarge the opening of such a nest. Sticks were used by chimpanzees to try and force open banana boxes at our feeding area. They may also be used during aggressive displays to intimidate other chimpanzees, baboons, or humans. One infant "clubbed" an insect on the ground. Grass stems are used when the chimpanzees are feeding on termites; they are also used as "investigation probes" to touch objects that the chimpanzees cannot reach with their hands or of which they are afraid. The end of the grass is then sniffed. Sticks and grasses may be trimmed to size and made more suitable in any of the above contexts. Leaves are used to wipe dirt off the body, and also as a "sponge" to sop up water in a hollow in a tree trunk when the chimp cannot reach the fluid with his lips. Here again the object is modified: before dipping the leaves into the water the chimpanzee crumples them by briefly chewing them. This makes his sponge considerably more absorbent and effective. Rocks are used as missiles during aggressive incidents and may be thrown forcefully and with good aim. One infant pounded an insect on the ground with a rock that he held in his hand. Once a chimpanzee used a twig to pick his nose; another individual used one to pick at something in her teeth.

There is not space here to detail the tool-using performances of laboratory- and home-raised chimpanzees, although some of them are very impressive. However, man is still the only primate to "make tools to a regular and set pattern" (26), and he is the only creature who relies on tools for his very survival (27).

Nonverbal Communication Patterns

Perhaps it is in the repertoire of postures and gestures which form the nonverbal communication system that some of the most striking behavioral similarities between man and chimpanzee are found. Chimpanzees may bow, kiss, hold hands, touch and pat each other, embrace, tickle one another with their fingers, bite, punch, kick, scratch each other, and pull out one another's hair. Not only do many of these movements look remarkably like many of the expressive postures and gestures of our own species, but the contexts likely to elicit the behaviors may be strikingly similar in the chimpanzee and man.

When an adult chimpanzee is frightened he may reach out to touch or even embrace another who happens to be nearby; this physical contact often has a calming effect on the gesturer. If both individuals were frightened, then both may be reassured. Similar contact-seeking behavior occurs commonly in man in stressful situations.

When two or more chimpanzees become suddenly excited—if, for instance, they suddenly come across a large amount of a favored food—they often exhibit intense contact-seeking behavior, embracing, kissing, holding hands, and patting each other, all while screaming loudly. Eventually they calm down sufficiently to start feeding. This behavior may be similar to that shown by a human child who, when told of a special treat, may fling his arms

around the bearer of good news. When peace was declared in London after World War II, the streets were full of people embracing, clasping hands, kissing, laughing, and crying.

After a young chimpanzee has been threatened or attacked, his need for reassuring physical contact with the aggressor is sometimes well illustrated. As he approaches the adult, still screaming, his behavior is tense; his limbs are flexed so that he is close to the ground and his movements are often jerky. As he gets close to the aggressor he may actually turn and move away for a few steps, but then he turns back again as his desire for contact apparently overcomes his desire to flee. When he finally reaches his superior he adopts a submissive posture, crouched close to the ground, still screaming and with his teeth and gums exposed in a wide grin of fear. In response the other chimpanzee will usually reach out and touch or gently pat the youngster, sometimes continuing for almost a minute until the subordinate quiets and gradually relaxes. Here again we find a similar pattern in man. In most societies people who have been quarreling will "make up" by means of physical contact, whether this be the cuddling and petting of a child or marital partner, or a more formal clasping of hands or brief pat on the back.

At this point I should like to emphasize that while the form of reassurance behavior looks very similar in man and chimpanzee—not only with respect to the gestures themselves and the context in which they may occur, but also in the relaxing effect of the physical contact on the submissive individual—the motivations underlying the behavior are probably quite different in man and chimpanzee. This is a fascinating and complex subject that I hope to discuss in detail elsewhere.

When two chimpanzees meet after a separation they may show gestures and postures that strikingly resemble some forms of human greeting. In such a context chimpanzees may bow, kiss, touch, or pat one another, hold hands, or embrace. A male may chuck a female or an infant under the chin. In chimpanzee society, reunion after separation often involves behaviors that serve to reestablish or emphasize the relative social status of the individuals concerned; originally, greeting behavior in man undoubtedly served a similar function. Indeed, this is still the case on some formal occasions, though human greeting behavior has for the most part become ritualized in our different cultures.

There are also similarities in the aggressive behaviors of man and chimpanzee. A quick upward jerk or a waving of the arm serves as a threat in both species, as may a level stare directed unwaveringly at a subordinate. A chimpanzee may adopt an upright posture when threatening and wave his arms above his head as he advances on the object that has elicited his aggression. He may throw objects overarm or underhand toward his victim. He may brandish a stick or make deliberate clubbing movements. Attacking chimpanzees may bite, hit, and kick their opponents. Female chimpanzees in particular sometimes scratch at and occasionally pull out handfuls of hair from their victims' heads.

THE UNIQUENESS OF THE HUMAN PRIMATE

It will have become apparent that even while I have been stressing the similarities between man and his closest living relative, many points of difference have been touched on. In fact, the longer I study chimpanzees and the more amazed I become at the extent of the behavioral similarities in the chimpanzee and man, the more I stand in awe of the gigantic evolutionary stride that our own species has taken in the last few million years. Let me very briefly enumerate a few of the characteristics that make man unique among the primates and that are highlighted by an understanding of the chimpanzee.

The chimpanzee has a wide range of calls. Each call is fairly reliably associated with some specific emotion—a scream usually signifies fear, a bark aggression, and so on. This means that the chimpanzee is able to communicate reasonably specific information about his feelings and his environment through the use of calls alone. But his repertoire of grunts and hoots cannot be compared with human language. Moreover, recent research into the speech centers of the human brain suggests that our language did not even originate from this type of primitive vocal communication.

The chimpanzee cannot convey information about the past and the future; he cannot pass on, through his vocabulary of calls, experiences of his own that might benefit his group or his species as a whole. It is true that recent work in teaching chimpanzees to communicate by means of sign language (28, 29) and with plastic word symbols (30) has shown convincingly that the chimpanzee is capable of a greater sophistication of mental process than most people were formerly prepared to accept, such as the ability to appreciate abstract concepts. But the chimpanzee intellect is dwarfed by that of a species that can produce a Plato, an Einstein, a Beethoven.

When the chimpanzee Washoe, trained in sign language, was shown herself in a mirror for the first time and was asked, in sign language, "What is it?" she signed back, "Me, Washoe." This suggests that the chimpanzee may show the beginnings of self-awareness. But man not only is conscious of himself as an individual being, he also questions the reason for his existence, he searches for clues as to how he came to be the way he is, he strives to understand his own behavior and the world and the universe in which he finds himself.

The chimpanzee, especially as a young adult, does show what might be considered the beginning of an affectionate heterosexual pair bonding: a male and a female may wander off together during the female's period of oestrus and sometimes for longer. At such times they may stay on their own, away from others of their kind (1). But this kind of relationship cannot be compared in any way with the tenderness and passion, the understanding and compassion, the exaltation and peace, that mark human heterosexual love in its highest form.

It is of interest that man has also leapt ahead of the chimpanzee in what we might call negative as well as positive intellectual evolution. Man can use language to the advantage of himself, his group, his species. With

words he can inspire others to acts of goodness and self-sacrifice. He can also use words to incite his fellowmen to deeds of evil and destruction. Despite his awareness of himself and of the individual existence of his fellowmen, and despite his understanding of the world he lives in, he can destroy not only human and animal life but the very environment that, as he alone among living creatures is capable of appreciating, enables him to live. Man, with his tremendous capacity to love, has a capacity to hate far transcending the worst of the squabbles that may break out between chimpanzees. Two neighboring communities of chimpanzees may occasionally indulge in displays of power as individuals hurl rocks and wave branches or even briefly attack one another. But they show nothing even remotely comparable to the horror of human warfare.

Today we are all aware of the tremendous need for a better understanding of our own species, yet only too often the scientist, searching for the biological basis of some human pattern of behavior, is confounded because intellect and culture have conspired to confuse the picture. We cannot afford to neglect any approach that might give us a better understanding of even a few aspects of man's evolution, his biology, his social behavior. And I believe the study of the chimpanzee is important in this respect.

And so we are continuing our intensive study at the Gombe Stream Research Center, where postdoctoral, graduate, and undergraduate students from the universities of Dar-es-Salaam, Stanford, Cambridge, and others are working as a team in our efforts to understand chimpanzee behavior more completely. Dr. David A. Hamburg is setting up a new facility at Stanford—"Gombe West"—where chimpanzees will be studied in groups in large outdoor compounds. Here we shall investigate problems that cannot be tackled in the field but that we know from our experience are relevant to the understanding of the behavior of the species. An initial area of inquiry will be the problems of adolescence; methods and goals will be closely linked not only with the research at the Gombe Stream but also with ongoing studies of human behavior. We hope that some problems arising in research with human subjects may be solved through work with the chimpanzees; in turn, work with chimpanzees may pinpoint areas of behavior that merit careful investigation in human subjects.

The study of the chimpanzee, with all his complexity of behavior and his close evolutionary relationship to man, is exciting and worthwhile in itself. If our research can help, even in the smallest way, in the better understanding of man, then our work will be even more rewarding.

ACKNOWLEDGMENTS

I should like to express gratitude to Tanzania's president, Mwalimu Julius Nyerere, to the prime minister, and to the many other government officials who have encouraged and assisted us in our work. The research was initially financed by the Wilkie Foundation and subsequently by the National Geographic Society, the Science Research Council, and the Wenner Gren Foundation for Anthropological Research; I should like to thank all these organizations. At present the work is financed by the Grant Foundation and I am particularly grateful to Dr. Douglas Bond, the president, and Mr. Philip Sapir, the director.

I could not have carried out the work in the field without the help of my husband, Baron Hugo van Lawick; I should like to thank him and also the many students and Tanzanian field assistants and helpers who have helped us collect an ever-increasing volume of information on chimpanzee behavior. I should also like to express my gratitude to the late Dr. L.S.B. Leakey, who gave me the opportunity to begin this research.

The Gombe Stream Research Center is now formally affiliated with Stanford University, thanks to the efforts of Dr. David A. Hamburg, and I should like to take this opportunity to express my deep gratitude to him for all that he has done in the past to stimulate our research at Gombe and for the exciting new research opportunities that his farsighted efforts are now providing at "Gombe West" at Stanford.

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Depot Phenothiazine Treatment in Acute Psychosis: A Sequential Comparative Clinical Study

BY CHING-PIAO CHIEN, M.D., AND JONATHAN O. COLE, M.D.

In a study of the relative efficacy of three drug treatments for 46 newly hospitalized acutely psychotic patients, fluphenazine enanthate, alone or in combination with chlorpromazine, proved significantly more effective than chlorpromazine alone. Although fluphenazine enanthate, alone or in combination, produced more extrapyramidal side effects than chlorpromazine alone despite prophylactic antiparkinsonian medication, additional antiparkinsonian medication adequately controlled these side effects.

LONG-ACTING injectable fluphenazine preparations have been available to the practicing psychiatrist for several years. It is generally agreed that they have several important advantages over other phenothiazines (1–6). A single intramuscular injection every two weeks by a nurse obviously consumes far less nursing time than does the administration of oral medication once, twice, or three times a day. Many schizophrenic patients are unreliable about taking oral medication following their release from the hospital. Others become quite skillful at evading the actual ingestion of oral medication even while hospitalized. Injectable depot fluphenazine ensures that effective antipsychotic medication is being made available to the patient.

Although clinicians have expressed legitimate concern that a long-acting phenothiazine injection might lead to prolonged undesirable adverse effects, clinical experience and the literature do not suggest that a long-acting injectable form is any more likely to produce such side effects than is the oral form of fluphenazine. Serious hypersensitivity reactions have apparently not been encountered. Admittedly, long-acting injectable fluphenazine preparations cause a relatively high incidence of extrapyramidal side effects, but these appear to be adequately controlled by conventional antiparkinsonian agents.

Depot-type fluphenazine preparations, such as fluphenazine enanthate (FE), appear to be increasingly accepted both in the United States and in Europe for the treatment of ambulatory psychotics in the community and for treatment-resistant patients on chronic psychiatric services. To date, the outstanding advantage of this form of medication over all other phenothiazine medication has appeared to have been in the treatment of ambulatory chronic patients (1–5, 7–11).

In the psychopharmacologic management of newly admitted psychotic inpatients, depot fluphenazine has usually been administered after patients have stabilized on other more conventional oral phenothiazines. Patients often receive oral fluphenazine for several weeks before FE therapy is started in order to accustom them to the medication and to make sure that undesirable side effects do not occur. The use of FE as an initial treatment for acute psychotics has rarely been reported and, as far as is known, its efficacy has not been explored in a controlled fashion using conventional, nondepot-type antipsychotics for a comparison (12).

In clinical practice FE therapy in acutely psychotic patients is usually administered in combination with other antipsychotic drugs. This may be based on two factors: The clinician may feel insecure in giving only one injection every seven to 14 days during an acute psychotic episode, or he may believe that pharmacologically, more antipsychotic effect is needed than can be provided by a long-acting injectable phenothiazine alone. This practice warrants careful examination since Freeman's intensive review of clinical studies of combination medications led him to conclude that use of a single antipsychotic agent was as effective as any combination of antipsychotics or other drugs in the treatment of acute or chronic schizophrenia (13).

Preliminary uncontrolled use of FE alone in the treatment of acute schizophrenic episodes has led us to suspect that a long-acting injectable drug, administered alone, is a satisfactory medication regimen for the management of acutely psychotic inpatients. The extensive experience one of us (C.C.) has had with the use of this agent in chronic and aftercare patients has led him to respect both the drug's efficacy and its administrative and logistic advantages.

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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This work was supported in part by Public Health Service research grant MH-16128 from the National Institute of Mental Health.

The authors wish to thank the staff of Dorchester Mental Health Center, Boston, Mass., and the staff of Douglas Singer Zone Mental Health Center, Rockford, Ill., for their assistance in this project.

The current study was designed to test the relative efficacies of FE alone, chlorpromazine (CPZ) alone, and a combination of the two treatments in newly admitted acutely psychotic patients.

METHOD

Subjects

The patients selected for study were all acute psychotics recently admitted to the two mental health centers where this project was carried out. All patients were judged to require antipsychotic medication by the clinical treatment staff. Both centers had a policy of treating psychotic patients as outpatients whenever possible. Thus it can be assumed that the patients in this study manifested intense, socially disturbing psychopathology. When the study was completed, 46 patients (24 men and 22 women) had been recruited for the trial. Their ages ranged from 17 to 62 years, with a mean of 36.8 years. Thirty-five patients (76 percent) received a diagnosis of schizophrenia, while nine patients (20 percent) were diagnosed as suffering from affective psychosis (depression), and two patients (four percent) from psychosis associated with organic brain syndrome (one associated with drugs and the other with alcohol).

Treatment Design

Upon their admission these acutely psychotic patients were randomly assigned to three treatment groups.

Group 1 (N = 16) received FE as the only antipsychotic medication. It was injected intramuscularly and at a dosage that could range from 0.5 cc. (12.5 mg.) to 3 cc. (75 mg.) at clinically determined intervals. Trihexyphenidyl HCl (Artane), 5 mg. twice daily, was given for five days after each injection to avert possible drug-induced extrapyramidal manifestations. Seven and one-half gr. of sodium amytal, injected intramuscularly, were administered as needed in the first 48 hours since FE was reported to take 24 to 36 hours to reach an effective blood level (14).

Group 2 (N = 15) received CPZ at an individually determined level, with both intramuscular and oral medication available to the treating physician. This group served as a control group (a standard treatment) since CPZ's clinical efficacy in the treatment of acute psychosis has been well established for more than a decade.

Group 3 (N = 15) received a combination of FE and CPZ, a common clinical regimen for acute psychotics at the two centers. Patients received FE in intramuscular injections of 0.5 cc. to 3 cc. at clinically determined intervals and CPZ daily. The dosage of CPZ and its manner of administration were at the discretion of the therapist. Trihexyphenidyl HCl was given prophylactically in the same fashion as in group 1.

At both centers, all patients involved in the study had their dosage regulated by the usual clinical staff. The research psychiatrist at each center scrupulously avoided influencing the amount or frequency of administration of antipsychotic medication used during the course of the study, except to specify that FE dosage should not exceed 75 mg. in a single dose. The dosage actually used therefore reflects a "clinician's choice" regimen based on the individual clinical judgments of different psychiatrists and psychiatric residents.

Evaluation

A form of sequential analysis was used because it appeared to offer the cleanest and most expeditious way of reaching an early, statistically valid assessment of the relative efficacies of the three treatments under study. A modified closed design, Bross's Plan A (15, 16), was selected for the present study because it would provide a test of statistical significance with a sample size of not more than 24 patients in each of the three treatment groups. A significance level of $p < .10$ was selected for the study because it would allow the achievement of an answer with the sample size previously noted and because it was felt that this level of significance would be clinically meaningful.

Each patient was rated after ten days of treatment, on a seven-point scale of global improvement, by an independent research psychiatrist who had no knowledge of the patient's medication. The decision to continue a patient on project medication beyond ten days was contingent on this global rating. If a patient was rated as "much improved" or "very much improved" he was considered a treatment success at that time and was discontinued from the study. At the same time, those rated as "much worse" or "very much worse" were considered treatment failures and were discontinued from the study. If the patient had an equivocal response, i.e., received a rating of "minimally improved," "no change," or "minimally worse," he was continued for another ten-day period of treatment and again evaluated. The decision to continue or discontinue was, as before, based on the outcome of the global rating. At the end of 30 days all patients were terminated from the study regardless of their rating.

For the purpose of the sequential plotting, patients who required the full 30 days of treatment and who were judged to be "minimally improved" or better were classified as treatment successes and those judged to be unchanged or worse were considered treatment failures. When a patient was discharged before the next evaluation date, he was followed on an outpatient basis until he completed the study. The psychiatrist responsible for the clinical care and medication of each patient in the study also rated the degree of improvement on a seven-point scale as long as the patient was in the study. His ratings were not used in the sequential analysis, but were used as an indirect way of comparing the independent research psychiatrist's rating with that of a clinician more actively involved in the patient's day-to-day management.

The Nurses Observation Scale for Inpatient Evaluation (NOSIE) (17) was used to evaluate each patient's ward behavior before the study and at ten-day intervals as long as the patient was in the experiment. The discharge rate within the 30 days with better clinical out-

come was also used as an indication of the efficacy of each medicine in the management of acute psychosis. For the evaluation of side effects, the NIMH form *Treatment Emergent Symptoms* (18) was used. There were no extensive laboratory tests since the drugs used in this study had been well investigated and had been reported to be clinically safe (11); however, routine laboratory determinations were performed on all patients at admission for monitoring purposes.

RESULTS

With three treatment groups to be compared by sequential analysis, three sets of comparisons—FE versus CPZ, FE versus FE and CPZ, and CPZ versus FE and CPZ—were carried out concurrently by plotting the preference sequence in Bross's Plan A graph (figure 1). The plotting procedure can be illustrated by using figure 1 as reference. The plotting line was moved one unit to the right each time a patient finished the trial. If a patient who was assigned to FE finished the trial with a rating of "much improved" or "very much improved" the plotted line moved obliquely upward toward the upper boundary; if this boundary was crossed, it would show the superiority of FE to CPZ ($p < .10$). If a patient failed to respond to FE (i.e., obtained a rating of "no change" or "worse"), the plotted line moved obliquely downward toward the lower boundary; crossing this boundary would show the superiority of CPZ to FE ($p < .10$). The same procedure was applicable to the patients who were assigned to CPZ, or to the combination of FE and CPZ.

Thus if the plotted line reached either the upper or lower boundary the study could be terminated, since one treatment would have been shown to be statistically superior to the other with only one chance out of ten ($p < .10$) that this superiority could have been due to chance alone. If the plotted line never reached the upper or lower boundary and instead reached the inner boundary, it was to be concluded that no statistically significant difference existed between the two treatment groups compared.

Comparison of FE versus CPZ. Thirty-one patients (16 from the FE group and 15 from the CPZ group) were required to finish the sequential comparison. As shown in figure 1, FE was superior to CPZ ($p < .10$).

Comparison of CPZ versus FE and CPZ. Twenty-seven patients (14 from the CPZ group and 13 from the combination group) were required to reach the significance level of $p < .10$ in favor of FE and CPZ over CPZ alone.

Comparison of FE versus FE and CPZ. Thirty patients (15 from the FE group and 15 from the FE and CPZ group) were required to end the comparison. Since the plotted line reached the inner boundary, no statistically significant difference between the FE group and combination group was demonstrated.

Total scores on the NOSIE scale, completed by research nurses at the two centers at the tenth study day, revealed significant improvements in ward behavior for patients in all three treatment groups, utilizing a paired t-test analysis. No significant differences among the three treatment groups in terms of net amount of change were revealed by single analysis of variance. Analyses of NOSIE scores at the 20- and 30-day periods were not carried out since a majority of the patients had completed the study after the ten-day assessment. The NOSIE scale, analyzed in this manner, appears to be less sensitive than a psychiatrist's global rating in revealing differences among the three treatments studied.

The following criteria were compared among the three treatment groups: 1) the average dosage of each treatment group, 2) the number of patients who finished the study at the first ten-day assessment, 3) the number of patients discharged from the hospital within 30 days after

FIGURE 1
Sequential Analysis by Modified Bross's Plan A

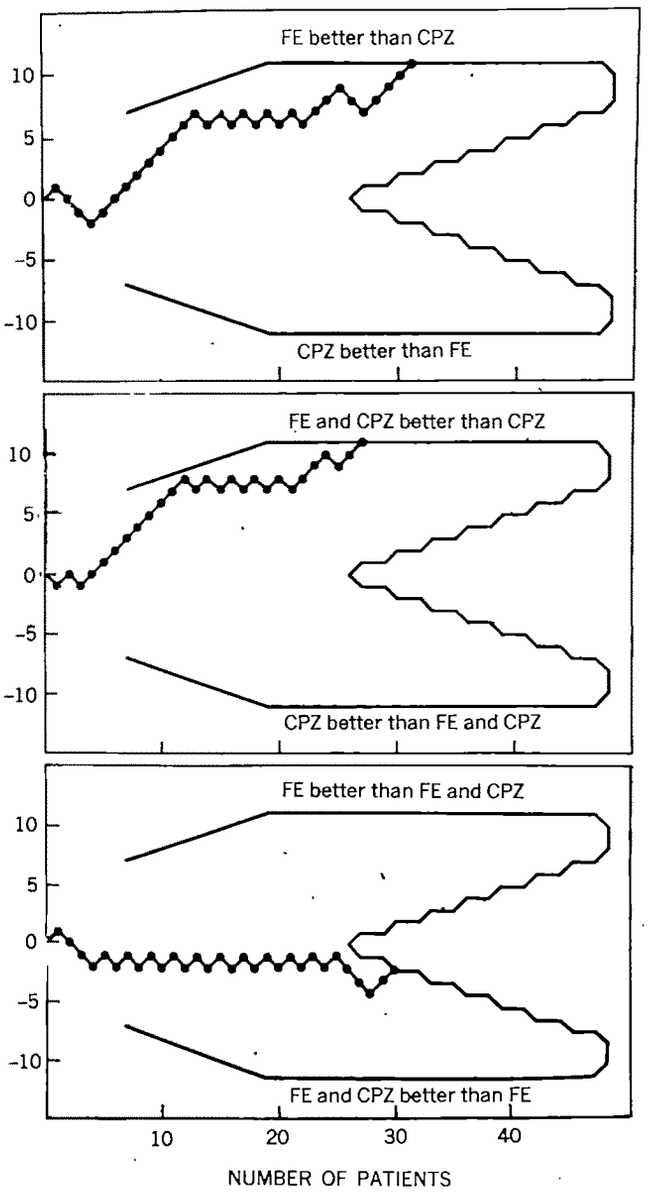


TABLE 1
Comparison of the Patients in Three Treatment Groups

Treatment Group	Number	Average Daily Dosage (Mg.)	Finished Study in First Ten Days*	Discharged Within 30 Days	Extrapyramidal Side Effects			
					Parkinsonism	Akathisia	Dystonia	Total
Fluphenazine enanthate	16	28.5**	12	11	7	1	4	9***
Chlorpromazine	15	388	7	8	1	1	1	3
Fluphenazine enanthate and chlorpromazine	15	26† 349.6	13	8	3	1	1	5

*$\chi^2 = 6.08$; d.f. = 2; $p<.05$.
**Every 11.5 days.
***Some patients suffered more than one of these side effects.
†Every 11.2 days.

admission, and 4) the incidence of extrapyramidal side effects. Table 1 shows the average dosage of medication as follows: FE, 28.5 mg. every 11.5 days; CPZ, 388 mg. per day; and in combination therapy, CPZ, 349.6 mg. per day, and FE, 26 mg. every 11.2 days. Regarding the number of patients who finished the study by the first ten-day rating, there were only seven (47 percent) in the CPZ group who were rated as "much improved" or "very much improved," while 12 in the FE group (75 percent) and 13 in the combination group (87 percent) received this rating. This difference was statistically significant ($p < .05$). In other words, the long-acting FE, either combined with CPZ or alone, was associated with earlier clinical improvement than was CPZ.

It is noteworthy that more than 50 percent of the patients from each treatment group were discharged within 30 days after admission. This reflects the general philosophy of the two mental health centers that hospitalization should be avoided if possible or should be short-term if a patient's condition requires admission. The incidence of side effects, as expected, was highest among the groups who received FE, either alone or combined with CPZ. In the FE groups, five to nine patients (33 to 56 percent) showed extrapyramidal side effects, compared to only three (20 percent) in the CPZ group.

DISCUSSION

The findings from the present study thus indicate that a moderate dosage of FE at a moderate interval is superior to a moderate dosage of CPZ, at least during the first few weeks of inpatient treatment. The clinical result might have been different, of course, if the dosage of CPZ had been higher. However, the dosage for all drugs was left to the discretion of the clinician. Although a fixed dosage schedule in the research design might have answered any question about a specific dosage-related pharmacological effect, the present design provides clinical information based on common daily clinical practice.

The superiority of FE to CPZ could derive from one or more of the following factors: 1) a real pharmacological advantage, 2) relative unreliability of medication ingestion in the CPZ group, and 3) the dosage of the drug being used. It is difficult to determine which factor or factors contribute most to our results. In any event, FE alone or in combination with CPZ is clearly an effective treatment for acutely psychotic patients and is reasonably superior to CPZ at the dosages used at the centers where the study was conducted.

Since the combination of FE and CPZ was demonstrated to be statistically superior to CPZ alone with a slightly smaller number of patients (27 versus 31) than was the case in the comparison of FE alone and CPZ, the combination was very slightly more effective than FE alone. The difference is so small that it might well have occurred as a result of chance differences between the two treatment groups. In any case, our finding generally coincides with the conclusion of Freeman's intensive review (13) of combination versus single medications.

There was a somewhat lower incidence of extrapyramidal symptoms in the patients receiving the combination medications (33.3 percent) than in patients receiving FE alone (56.2 percent). Although it did not reach statistical significance, it may be worthy of note as a strong trend, since it is in a direction opposite to that which one would have expected. Could CPZ have had a mild antiparkinsonian effect? Similar findings were reported for the combination of CPZ with reserpine or trifluoperazine by several investigators (19–22). Cotzias and associates reported some improvement in eight out of 11 parkinsonian patients who received CPZ and ethopropazine, respectively (23). Thus they demonstrated an alleviative function of the phenothiazines in the parkinsonian syndrome. The anticholinergic property of some phenothiazines may possibly explain this alleviative function. If, indeed, CPZ has the dual function of both alleviative and causative effects of parkinsonian syndromes, this is certainly an intriguing area for future research.

The high incidence of extrapyramidal side effects ob-

served among the patients who were on FE, either alone or combined, despite the prophylactic use of an antiparkinsonian agent, raises a question about the utility of such a prophylactic practice. Five days of antiparkinsonian medication following each injection was prescribed in this study because of the common clinical observation that most of the extrapyramidal episodes occurred during the first few days after an injection of FE. The results observed, however, do not suggest any useful prophylactic effect and are compatible with the reports by DiMascio and associates (24, 25). In a separate study we conducted, a comparison was made among three groups who were all receiving FE. These three groups received: 1) antiparkinsonian medication daily, 2) antiparkinsonian medication for five days after each injection of FE, 3) antiparkinsonian medication as needed. This study also failed to support the validity of prophylactic use of antiparkinsonian medication.

In using sequential analysis based on global clinical judgment, one may question the reliability and validity of the evaluating psychiatrist's rating because "blindness" to the treatment conditions usually means minimum involvement with the patient. The blind rater had to evaluate the patient in a relatively brief interview (ten to 20 minutes). Since the blind rater agreed in 95 percent of the assessments with the staff who spent more time with the patient, the validity of a clinical global rating based on a relatively brief appraisal by a clinically experienced blind rater is affirmed. The sequential method used in this study might well be used in the clinical comparison of other treatments in psychiatry, with resulting economy in the number of subjects and rating time required.

SUMMARY

Despite the many encouraging reports of its maintenance use for chronic psychotic inpatients or less disturbed psychotic aftercare patients, the usefulness of depot-type FE for acute psychotic patients has rarely been reported, and its efficacy has rarely been compared with conventional nondepot-type antipsychotic agents. The present study was designed to explore the clinical efficacy of FE alone in acute psychotic patients, using CPZ as a standard control treatment. A third treatment, the combination of FE and CPZ, was also compared since this type of combined medications is often used in clinical practice.

A sequential analysis design (Bross's Plan A) was employed. This enabled statistically significant differences at the $p < .10$ level to be obtained after 46 newly admitted psychotic patients had been studied. Both FE and FE combined with CPZ were superior to CPZ alone at this level. The two treatments involving FE were not significantly different from each other. Although FE alone or in combination with CPZ produced a higher incidence of extrapyramidal side effects than did CPZ alone, despite the addition of prophylactic antiparkinsonian medication, these side effects were adequately controlled by the use of additional antiparkinsonian medication. This finding casts some doubt on the efficacy of routine prophylactic antiparkinsonian medication.

This study demonstrates that FE alone is a useful and effective agent in the treatment of newly hospitalized acutely psychotic patients. The addition of CPZ appears to do little to increase FE's therapeutic efficacy. At the dosage used (an average of about 350 mg. of CPZ per day), CPZ was significantly less effective than FE, either alone or in combination, in the treatment of acute psychotic states.

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Questions of the Month

Each lettered heading is followed by a list of numbered phrases. For each numbered phrase choose:
A if the item is associated with (A) *only*,
B if the item is associated with (B) *only*,
C if the item is associated with *both* (A) *and* (B),
D if the item is associated with *neither* (A) *nor* (B).

Questions 1-5

(A) Psychotherapy
(B) Psychoanalysis
(C) Both
(D) Neither

1. Ventilation and abreaction
2. Formation of transference
3. Support for ego defenses
4. Development of insight
5. Resolution of transference neurosis

(The Questions of the Month are from the Self-Assessment Program of the APA. The answers are supplied on page 27 of this issue.)

Schizophrenia: A Family's Projective Identification

BY JAMES R. STABENAU, M.D.

By means of projective identification, parents may contribute to the differential life course leading to schizophrenia in a family member. The author presents the case history of a family with a set of monozygotic male twins discordant for schizophrenia. The father, by suggesting that one twin was more vulnerable than the other, helped establish in that twin a negative identity, an inhibition (rather than a neutralization) of instinctual expression, and an aggressive (rather than libidinal) tie with the parents. The ego splitting that resulted seemed to be based on the child's projective identification in a pathologically defensive way.

NONGENETICALLY determined, enduring qualities of constitutional predisposition (Freud's "Congenital Ego Variations," Hartmann's "Innate Maturational Tendencies") were noted to be determinants in the process of differential parental expectancy and divergent states of ego development in childhood in a series of monozygotic twins. Clinical data were obtained from a detailed investigation at NIMH of a family with a pair of adolescent male monozygotic twins who were discordant for schizophrenia. Freud and Klein described the normative aspects of the projective identification process in development and indicated its defensive utilization in the psychotic state by a projective splitting of the ego (1, 2). Other data from the NIMH Twin Study (16 families) and Comparative Family Study (25 families) suggest that qualitative differences in projective identification by parents in relation to their children may be one of the processes contributing to the differential life course leading to schizophrenia (3–6).

THE ALLEN FAMILY HISTORY

The Allen family (all family names are fictitious) was referred as part of the NIMH series of monozygotic twins discordant for schizophrenia; it consists of the father, Joseph Robert Allen (a dentist), age 45; the mother, Helen Stanley, age 46; Anne, age 16; Kevin Robert (Robbi); his identical twin brother, Joseph Stanley (Stan), age 14; and Tobby, age 6. The twins were born one and one-half years after Anne, the result of a planned pregnancy. At eight months' gestation, there was fear that Helen Stanley might be pregnant with triplets, but "it turned out only to be two." Robbi was firstborn, weighing 6 pounds 12 ounces. His head had more molding than second-born Stan, who was delivered four minutes later, weighing 6 pounds 0 ounces. Robbi was noted as being "more drowsy" and "less alert," while Stan had "shining eyes."

Both were pink and responsive. From birth on, differences between the twins were observed by each of the parents, their sister, and friends. The family stated that Robbi was heavier in infancy and had a round face. He was more placid and easygoing and less alert, while Stan was lighter in weight, had a longer, tapered face, and was more alert. Robbi resembled the men in Dr. Allen's mother's family, that is, his ears "stick out." Robbi "was more easygoing and in less need for [sic] discipline than Stan. He was well behaved, but I like to see life in a boy [Stan] even though he's doing something wrong. It's better than a boy who's good because he feels he should . . . and who's not interested in anything [Robbi]." Robbi was "slower, less energetic or ambitious to undertake new things or explore," while Stan "grasps ideas more quickly and sometimes gets careless and overlooks things; Stan is more ambitious and more interested in trying new things. . . . Robbi wastes a lot of time alone in his room"; Stan was "more outgoing and sociable. Stan has more initiative. He got a morning paper route and worked it for a year, while Rob got a neighborhood evening paper route and gave it up quickly." Mrs. Allen noted:

> You can't help but have slightly different . . . well, each of your children are individuals even when they're identical twins; they're still individuals to you. Well, I mean you don't necessarily treat them like peas in a pod because they're not peas in a pod. They are different. You can love them all equally but that doesn't mean your reactions to each of them is the same. *Your* personalities are different, so naturally reactions are different.

Gifford and associates (7) have commented on the differences in size, behavior, and rate of maturation present at birth, presumably the result of differences in the intrauterine environment. These physical and behavioral

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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The author would like to thank Dr. William Pollin, Dr. Joe Tupin, and Ms. Martha Werner of the Clinical Center, National Institute of Mental Health, Bethesda, Md., for their collaboration in this work.

TABLE 1

*Monozygotic Twins Discordant for Schizophrenia: Early Characteristics**

Characteristic	Other Studies (N=86 pairs)		NIMH Study (N=14 pairs)		Total		
	Index**	Co-twin***	Index	Co-twin	Index	Co-twin	Ratio (I/C)
Neurotic as a child	11	1	5	0	16	1	16.0
Submissive	27	2	10	2	37	4	9.3
Sensitive	26	3	12	2	38	5	7.6
Serious-worrier	10	2	12	2	22	4	5.5
Obedient-gentle	21	2	10	4	31	6	5.2
CNS illness as a child	12	2	5	2	17	4	4.3
Any birth complication	18	5	6	1	24	6	4.0
Asphyxia at birth	8	3	4	0	12	3	4.0
Dependent	2	0	10	3	12	3	4.0
Well behaved	9	0	7	5	16	5	3.2
Quiet-shy	16	4	9	4	25	8	3.1
Stubborn	14	4	6	3	20	7	2.9
Weaker	16	10	11	1	27	11	2.5
Shorter	27	16	13	1	40	17	2.4
Lighter at birth	29	18	12	2	41	20	2.1
Slower development (walking)	3	1	6	4	9	5	1.8
Somatic illness as a child	9	9	9	5	18	14	1.3
Second-born	27	29	10	4	37	33	1.1
Fiery	9	5	5	9	14	14	1.0
Athletic	0	4	5	3	5	7	−1.4
Leader	9	21	5	9	14	30	−2.1
Outgoing-lively	8	26	5	9	13	35	−2.7
Spokesman	4	11	3	11	7	22	−3.1
Better at school	6	18	2	11	8	29	−3.6
More intelligent	2	7	2	9	4	16	−4.0
Married, co-twin not married	1	21	0	5	1	26	−26.0

*The figures shown represent the number of twins who were clearly differentiated by intrapair co-twin comparison.

**Schizophrenic index twin (I).

***Nonschizophrenic, monozygotic co-twin (C).

differences establish the original basis for certain individual characteristics in the developing ego of each twin. Although these differences are not genetically determined, they have some of the enduring qualities of constitutional predispositions (7).

DIFFERENTIAL EXPECTANCY

The NIMH group has substantiated the observations of Gifford and associates from retrospective data in a large series of one-egg twins (3). Review of the NIMH twin series of 14 pairs of monozygotic twins who were discordant for schizophrenia and of published accounts of life data from 86 additional pairs of monozygotic twins who were discordant for schizophrenia has yielded: 1) the following nine behavioral traits as characteristic of the pre-schizophrenic, pre-illness twin: submissive, sensitive, obedient-gentle, serious-worrier, dependent, well behaved, quiet-shy, stubborn, and neurotic as a child and 2) the following six physical traits as distinguishing the pre-schizophrenic twin: having had an illness of the central nervous system as a child, any birth complications, neonatal asphyxia, weaker, shorter, and lighter at birth. The criterion employed here was that the designated trait was present at least twice as often for the index twins as for the nonschizophrenic co-twins (see table 1).

Two items that appeared the most consistently in the 14 worldwide sources for these data were the pre-illness developmental description of the schizophrenic twins as more submissive (9.3:1) and more sensitive (7.6:1) than their co-twins. This range of psychobiologic "markers" may play a significant role within pathogenic families in helping to establish the selection of one twin as the more vulnerable and the one whose life course could be pathologically altered the most seriously. For 12 of the 16 pairs studied at NIMH to date the schizophrenic twins had a significantly lower birth weight (eight percent lighter than their co-twins). In addition, three of the four higher-birth-weight twins who developed schizophrenia were suspected of having a physical defect in the first three years of life, which served as a source for concern about that twin, indicating that "something was wrong" with him and not with the other. This was the

case with Stan and Robbi. Factors such as these may be the type of constitutional factors Freud mentioned as playing a role in the development of schizophrenia. Although nonspecific, they do connote a degree of vulnerability. This in itself may play a significant role in producing a deficiency in ego development.

If the establishment of an inner sense that something is wrong with the pre-schizophrenic that is not wrong with others is of etiologic importance in schizophrenia, it may be through establishing for the schizophrenic a negative expectancy, negative identity, or a defective sense of self-esteem. Jacobson referred to the assumption that the infant's earliest gratification-frustration experiences with the mother play an important part in stimulating perception and in promoting the process of differentiating the infant's self from the object world (8). Ritvo and Solnit (9) made the point that "equipment factors" in the child are important in determining what constitutes frustration for a particular child with a particular mother. Their patient, Margaret, demonstrated that when characteristics of the child interact forcefully with the deepest conflicts in the mother, adaptational difficulties of both the child and the mother are exaggerated and the close empathic tie with the mother, necessary for later identification, is hampered.

Robbi, like Margaret, demonstrated that the interaction of his "sensitivities" with his mother's anxious, ambivalent care (based on seeing the child as less alert) was characterized more by fearful uncertainty and discomfort than by the mutual satisfaction of mother and child. This mother-child atmosphere inhibited instinctual expression more than it facilitated the capacity to transform instinctual expression. The capacity in Robbi to neutralize was *not* facilitated, and neutralized energies were used for defenses (fearfulness, hesitancy, and so forth) and therefore were less available for adaptation. For Stan, who enjoyed a more secure and positive place in the mother-child relationship, the sequence led to a facilitated capacity to neutralize instinctual expression.

Neutralization has been described as the transformation of the energies of the instinctualized id into de-instinctualized energies that are subject to the service of the ego. Regressive behavior, including the psychotic process, may be an indication of deneutralization, while in the child with an ongoing process of neutralization, autonomous ego functions and supplemented activities emerge. Ritvo and Solnit concluded: "When internalization proceeds by way of a predominantly positive libidinal tie to the love object, it is more likely to proceed to completion than internalization that develops from a predominantly aggressive tie," and "the neutralization of libidinal energies as a result of identifications are more likely to make energy available for autonomous ego functions than identification proceeding from a predominantly aggressive tie to the object" (9).

PROJECTIVE IDENTIFICATION AND THE FAMILY

In this family Dr. Allen's self-image is closely tied to a competitive struggle with his older brother Kevin. He has always seen himself as comparatively weaker, less successful, less bright, more mischievous, "a black sheep," and more slow and plodding than his brother. Significantly, the problems that concern Robbi and his father reflect areas of unresolved personal conflicts or the repetition of problems the father experienced in growing up. Dr. Allen identifies the side of himself he likes or his ideal self-image with Stan, and he sees his negative qualities and "real" self-image reflected in Robbi. On the one hand he objects to parental influence in children's decisions; but on the other, he expresses concern about how the family should channel Robbi's interests. He values independence and initiative yet becomes upset when the child does not conform to parental expectations and requirements.

An excerpt from a conjoint family therapy session illustrates one aspect of projective identification in the relationship between Dr. Allen and his two sons.

> *Father:* "I don't . . . no, I'm not disappointed. All I think the boys should do is try and work harder. And I see traces of myself in both boys. That's why I don't . . . I see some things, if you're trying to compare, in both boys. I see that Robbi is hardworking and conscientious. I guess they're both conscientious for that matter. Robbi has been a little more aware of, I think maybe, of not being late for school. I was that type. I was very afraid to be late at school and I was hardworking and uh and uh . . . Robbi's . . . comparing myself to Robbi . . . and also that I didn't do well in track, of course, the same way . . . in high school. . . ."
>
> *Robbi:* "I'm doing fine."
>
> *Father:* "You're doing better than I did, that's right."
>
> *Mother:* "That bothers Rob when you say it like that—so that you're deprecating him. . . ."
>
> *Father:* "Actually . . . I told him I did worse than he did. I told him I did worse."
>
> *Mother:* "That's like saying he's not doing so good. . . ."

We learn that, additionally, Robbi compares himself unfavorably with Stan. A source for this appears to come from the father's indicating that Robbi has the qualities he dislikes in himself, whereas other qualities, which he admires, he finds in Stan. This type of splitting based on projective identification may be a significant source for the different self-image of each of the twins.

The Comparative Family Study of the NIMH Twin and Sibling Section has made a beginning toward delineating whether a differential expectancy based on projective identification may exist within a number of families (4). As described in the study, in six of 11 families of schizophrenics, the parents' ideal self-image was negatively correlated with their view of the index child, while it was positively correlated with their view of the control child. Of the five families of "normals," all correlations were positive except for one control sibling. This suggested for the parents of schizophrenics a negative-positive split in their view of the index and control sibling. That is, for the parents of schizophrenics, qualities that they described as being part of their ideal or self-image were seen as being present in the nonschizophrenic, same-sex child and absent from the schizophrenic child (see table 2).

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TABLE 2
Projective Identification: Correlation Coefficients of Interpersonal Checklist Profiles*

Family Code Number	Parents' View of Self	
	View of Index Child**	View of Control Child***
Schizophrenic (N = 11)		
5	−.28	.42
11	−.23	.68
10	−.22	.57
4	−.16	.13
1	−.09	.37
3	−.01	.67
7	−.08	−.03
6	−.05	−.17
9	.07	.35
8	.25	.24
2	.45	−.02
Mean	−.03	.29
Normal (N = 5)		
1	.13	.36
5	.14	.43
4	.14	.21
2	.15	.23
3	.42	−.10
Mean	.20	.23

* Pearson product-moment method.

** The mean correlation coefficient for each family was derived from the average of the following correlations: father's view of self and view of index child; father's ideal and view of index child; mother's view of self and view of index child; mother's ideal and view of index child.

*** The mean correlation coefficient for each family was derived from the average of the following correlations: father's view of self and view of control sibling; father's ideal and view of control sibling; mother's view of self and view of control sibling; mother's ideal and view of control sibling.

Both Freud and Klein have described the normative aspects of the projective identification process in development, as well as indicating that this process may be defensively used in excess, such as in a psychotic state where the process is characterized by a splitting of the ego of the individual (1, 2). The data from the NIMH Twin Study and the Comparative Family Study of Schizophrenia have suggested that the use of projective identification in the parents, relative to their children, may be one of the processes contributing to the differential life course of a schizophrenic family member (3–6). For the pre-schizophrenic child the negative quality of the projective identification utilized by his parents may lead to a predominantly aggressive rather than libidinal tie between him and his parents. This appears to contribute to impairing the child's ability to neutralize instinctual energy and this in turn leads to his utilizing projective identification in a pathologically defensive way that produces ego splitting. Such an individual further utilizes the projective distortion of reality as a means of handling the intrapsychic conflict that arises with increased aggressive and libidinal instinctual demands, which usually occur prior to the psychotic state.

The Allen family demonstrates this mode of splitting in projective identification. In his relationship with his sons, the father perceives in Stan and rewards him for the qualities that he sees as positive in himself (libidinal tie), while he admonishes and punishes Robbi for having the projected negative qualities that he disavows in his own personality (aggressive tie).

DEFENSIVE ASPECTS OF THE PSYCHOSIS

The nature of the intrapsychic conflict in Robbi was first verbalized in a conjoint family therapy session two years after contact was first made with the family at NIMH. During this session, Robbi described depersonalization, somatic delusion, and ideas of reference.

Robbi: "Well, let's see. In the first place, I started having them to some extent . . . I started having some sick thoughts, uh, not really too sick, but some sick thoughts from the seventh grade, and I was having sort of . . . a real tiny bit mentally disturbed in the seventh grade—well, I started being like this about a month before Georgianne's death (an adopted infant) and I don't think that that really had much to do with it because I was like . . . I started being like this before Georgianne's death, that that really didn't have that much effect on me anyway."

Therapist: "And up until 13 you had none of this, except partly in the seventh grade?"

Robbi: "Well, I might have had a little bit, in certain cases, a little bit sensitive and stuff like that, but I will say in seventh grade I suffered mentally—mentally in the sense that if anyone did something to me, I would be terribly sensitive to it and I would take it very much to heart and things like that, and I thought things like in the seventh grade people are really mean to each other; people are really bad. Well, for one thing . . . right now . . . I'll discuss some of the feelings I have right now . . . uh . . . that everything . . . this may sound sort of crazy but I feel like everything that is me is sort of up in my head because that's where all the . . . all the strain and everything else is going on and that's a feeling I've had for a long time.

"So I've had this belief for several years, and I thought that Dad and Stan also had this physical defect, and I guess you'd call it and let's see . . . and let's see. Well, anyway the reason why he thinks I get this idea is because . . . because . . . because I have trouble talking to people and stuff like that. I used to think just about every couple of seconds of my life I thought about that fact—that there was something wrong with my mouth. Every couple of seconds of my life and right now I think of it an awful lot too. When I say things, I read meanings into what people say and also into what people do, see, and so sometimes when I say something like, 'That rug is gray,' well, then I mean . . . I get this idea that it's sort of poetic, sort of, and it means something else like—anything. I guess you know what I mean, like it has a hidden meaning like, 'That rug is gray' is sort of a code to say something else."

Thus Robbi described through ideas of reference a series of symptoms including an early concern that there was something wrong with him, all of which indicate an effort to cope defensively with the intrapsychic conflict.

Regarding significant differences between neuroses and psychoses Arlow and Brenner concluded that:

In the psychoses instinctual regression tends to be more severe and more pronounced than in neuroses. Pre-phallic fixations and conflicts over derivatives of these drives are particularly prominent.

In the psychoses conflicts over aggressive impulses are more intense and more frequent than in the neuroses. Because of these impulses that patient has a special need to protect the object from his own aggression. As a result, serious disruption in the patient's relationship with external objects and the environment are likely to be prominent.

In the psychoses disturbance of the ego and super-ego functioning are more severe than in neuroses. The disturbances in functioning may be due to faulty endowment, maldevelopment, or regressive deterioration as a consequence of conflict (10).

Beres, from a study of deviant children, indicated how "certain developmental traumata in specific cases in childhood may leave the ego vulnerable to later progressive involvement. Such conditions of ego vulnerability may facilitate ego regression in a manner similar to the way in which instinctual fixation may lead to instinctual regression" (11). Robbi was considered to have "something wrong" with him in the early neonatal oral period; thus the choice of a delusion concerning a distortion or deformity of his mouth may be related on one level to this "trauma" during the oral stage. On the other hand, a level of symbolism in Robbi's somatic delusion appears to relate to his father's drilling in people's mouths as a dentist and to be an elaboration of an aggressive, though sexualized, tie with his father through a combination of oral incorporation and aggressive drilling.

The authors I have cited here and others have pointed out that the weak ego of the psychotic patient is not able to counteract the regressive reinstinctualization of functions that had previously achieved a high degree of secondary autonomy. Consequently, intrapsychic conflicts become overwhelmingly acute, and the ego is forced to resort to extreme measures of defense. Chief among these is the regressive alteration of ego functions. The extreme forms of denial, projection, isolation, and introjection that Robbi exhibited are also typical of the ego's defense armamentarium in psychosis.

Although the term "projective identification" is primarily used to describe a level of early object relations, when the young adult or adult individual splits off and projects good and bad parts of the ego onto external objects, which then become identified positively or negatively with the parts of the self projected in the other, it is viewed as a mechanism of defense. This defense is utilized to a greater degree in the schizophrenic state and apparently to a lesser, although significant, degree by the nonpsychotic parents of schizophrenics, as noted in their relations to their children.

SUMMARY

From this case study and the NIMH Twin and Comparative Family Studies it appears that certain physical, temperamental, or developmental attributes serve as a focal point for the projection of parts of the parent's negative self-image onto the child. The projected features appear to be dissociated, repudiated, negative elements from the parent's personality or representative portions of repudiated, introjected objects from the parent's own life. The negative quality of the projective identification utilized by the parents of the pre-schizophrenic appeared in this case to have led to a predominantly aggressive, rather than libidinal, tie between the parent or parents and the child, as compared to his same-sex sibling or cotwin. This may have contributed to an impairment in the ability of the pre-schizophrenic child to neutralize instinctual energy, a decreased adaptive and coping capacity, and ego splitting produced by pathologic defensive use of projective identification in the pre-psychotic or psychotic state.

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The Private Practice of Community Psychiatry

BY WARREN T. VAUGHAN, JR., M.D., DONALD E. NEWMAN, M.D., ALLAN LEVY, M.D., AND SAMUEL MARTY, M.D.

The successful incorporation of the private practice of psychiatry into a system of community mental health care was attributable to several factors. They included an affluent catchment area; support from hospital administration and staff, private mental health practitioners, and a state-county finance program; and attempts to eliminate schisms that have traditionally separated private and public sectors of psychiatry. The success of this program has implications for the development of mental health services in the 1970s.

THIS IS AN ACCOUNT of the successful development by private practitioners of a comprehensive community mental health center at Peninsula Hospital and Medical Center, Burlingame, Calif. The center serves a four-city catchment area of 94,000 persons 15 miles south of San Francisco. It has developed a full spectrum of services including mental health consultation and education and private-office-based outpatient services as well as center-based inpatient, emergency, and partial care services.

The catchment area contains relatively few disadvantaged ethnic minority families or individuals. The 1970 census reported more than 2,500 persons with Spanish surnames in the catchment area, but only several hundred Orientals or blacks. The hospital district embraces a wider area than the assigned catchment area, comprising a total population of more than 200,000 persons. A California hospital district is a public agency that raises money by taxation and bond issues for capital construction and equipment costs. Patient care and treatment itself must be paid for at cost through other revenue sources, such as private funds, insurance, Medicare, Medicaid, and CHAMPUS (Civilian Health and Medical Program of the Uniformed Services).

In June 1963 the executive committee of Peninsula Hospital's professional staff appointed an ad hoc committee on psychiatric services and asked one of us (W.T.V., Jr.) to serve as technical consultant and co-chairman of the committee together with the chairman of the department of medicine. The committee's task was to develop a plan for full inclusion of psychiatry into the professional services of Peninsula Hospital. A year later, in July 1964, a 12-bed inpatient unit called the Mental Health Unit was opened, with one of us (D.E.N.) serving as director.

In August 1964 the first meeting of the psychiatric section of the department of medicine was held, attended by the seven psychiatrists then on the professional staff of the hospital. In the fall of 1964 funding for mental health centers became available under federal community mental health center legislation; and in December 1964 representatives of the hospital began to meet with the Mental Health Division of the San Mateo County Department of Health and Welfare to explore the possibility of developing a comprehensive community mental health center at Peninsula Hospital. A preliminary plan was drawn up that provided a wide range of community-based services incorporating ideas and principles such as accessibility, continuity of care, and collaboration with other professionals—principles painstakingly developed by mental health planners in the 1950s and early 1960s (1–5). In March 1965 the staff psychiatrists at Peninsula Hospital voted to take responsibility for developing a comprehensive community mental health center, and the board of directors of the hospital district voted to proceed with plans for a center in conjunction with the building of a new eight-story wing.

A construction grant application, approved by local health groups, was submitted to NIMH later in the year. It was accompanied by a resolution from the County Board of Supervisors expressing their intention to contract with Peninsula Hospital District to provide comprehensive mental health services to the communities yet to be designated as the catchment area for the new mental health center.

DEVELOPMENT OF SERVICES

The center opened in March 1969. In June 1969 the professional staff voted bylaw changes establishing a department of psychiatry and an affiliate membership to the professional staff for licensed clinical social workers and psychologists in private practice. The new department of psychiatry organized itself with an executive committee and a number of other committees including committees on medical audit, proctorship, utilization re-

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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view, research and new programs, and continuing education.

The center was awarded a staffing grant beginning September 1969, and in October 1969 it began providing a full range of psychiatric and mental health services to its designated four-city catchment area under provisions of a $500,000 contract with the San Mateo County Department of Health and Welfare. The new center became the service center for region II of the county's new regional center program. Indirect services to the catchment area, comprising community organization work, mental health consultation, and education, have been paid for under the contract. Direct patient care and treatment is paid for by a number of means, one of which is full or partial payment for hospital care and professional services for financially eligible individuals and families under the county contract.

California's Short-Doyle Act, as amended in 1969, provides the legal and fiscal means for contracts with private providers, such as ours with San Mateo County.

From January through December 1971 the center provided 8,451 days of inpatient care to 956 persons. Of these, 180 came under the county contract and 282 under Medicaid or Medicare. The remaining 494 patients had private insurance or other coverage. During 1971 the center provided 12,390 sessions of partial care to 1,592 patients, of whom 566 were covered by the county contract and 545 by Medicaid or Medicare. The remaining 481 patients had insurance or other private means. Fifty-seven percent of these patients and 77 percent of the partial-care patients were from the designated catchment area. A total of 1,173 patient visits were made to the psychiatric emergency service, which is staffed by a specially trained crisis intervention team and an attending psychiatrist on call 24 hours a day. Sixty-three percent of these visits were made by patients within our designated catchment area.

The center delivered 6,820 sessions of individual, group, and family therapy to 899 outpatients in private practitioners' offices under the provisions of the county contract. Indirect services, provided primarily by salaried center personnel, included in 1970–1971 more than 600 hours of staff time spent in consultation and education work with elementary and high school personnel. Monthly group meetings with school psychologists and guidance personnel, police and probation workers, and the clergy were developed during 1970–1971. We are now expanding our concept of indirect services to include such programs as a teen-age drop-in center and parent education programs.

A citizens advisory committee was established by the hospital board of directors in 1969. By the spring of 1971 it had become effectively organized and played a vital role in mobilizing citizen interest and support at the time of a serious mental health budget crisis, which for a time threatened the center's county contract. In December 1970 the hospital board purchased an adjacent office building, which it has remodeled to provide a social milieu and group therapy center for the treatment of children, adolescents, and their families. This new facility opened in the summer of 1971. The citizens advisory committee has responded to these developments with the establishment of two subcommittees—a subcommittee on children and youth services and a subcommittee on financing and long-range planning.

By July 1971 the center had survived its first two years and its first major crisis. The professional staff had grown from the original seven psychiatrists to 45 attending psychiatrists and 45 affiliated nonphysician licensed mental health practitioners. To the basic question, "Can a group of private practitioners join together to develop and run a comprehensive community mental health center?" we can now report, "yes." The fact that this is possible seems to us to be of extraordinary importance as we move during the 1970s into: 1) the further development and strengthening of community-based programs of care and treatment for psychiatric patients, 2) the development of new arrangements for payment for services under government-sponsored plans as well as private insurance and other prepayment plans for groups of individuals and families, and 3) the implementation of preventive psychiatry through community action and collaboration with other professionals and agencies concerned with families and children.

Every patient at our center has a private attending mental health practitioner. He is paid on a fee-for-service basis for services to patients under the contract, with the hospital district serving as fiscal intermediary, much as Blue Shield serves in this capacity for Medicare. We have developed a center intake and referral service for the catchment area that, in addition to the emergency service, serves as a bridge between the center's salaried professionals and the private practitioners who assume clinical responsibility for all patients. Patients can come into the system at various levels of care—for emergency services, inpatient admission, and outpatient consultation. They can receive services with a minimum of delay and with built-in continuity of care.

In February 1971 the professional staff voted to set up a peer review committee for prior authorization and utilization review of all cases in which the hospital bill and professional fees were being paid for in whole or in part through the county contract. The need for this became apparent by October 1970, when we found that contract funds allocated to the catchment area were being spent at a much too rapid rate when there was minimal case monitoring by the center itself. One year's experience of reviewing over 263 cases involving more than 65 private practitioners indicates on the whole a very positive response on the part of the practitioners.

The usual administrative approach to case review, involving impersonal third-party intrusion into clinical practice and the therapist-patient relationship, has been replaced by a focus on developing a balance between clinical needs and financial realities in a case conference atmosphere, with development of treatment plans linked to explicit treatment goals. This experience has many implications for other groups of private practitioners who may group together as a hospital staff, or in medical or psychiatric societies or foundations, to take responsibility for

contracted mental health services to designated groups of people.

FACTORS CONTRIBUTING TO SUCCESS

We can readily identify four factors that have contributed to the success of the center.

1. Peninsula Hospital is located in an affluent community with well-established patterns of private health care delivery. This factor has undoubtedly contributed to the success of the center; however, it does not mean that this private practice model cannot also be used in less affluent areas.

2. The professional staff and hospital administration supported the development of the center. A public hospital district is a rather small administrative unit; in contrast to a large county or state administrative structure it has a capacity for administrative flexibility that maximizes its ability to innovate in program development, use of personnel, and staff development.

3. We have a favorable manpower situation and an interested citizenry. A decade of pioneering in community mental health services for San Mateo County has successfully reduced the stigma surrounding mental health care and has developed a felt need within the community for services close to home. This has resulted in an influx of well over 100 private mental health practitioners to San Mateo County since 1958, most of them interested in the development of a broad spectrum of community-based direct and indirect mental health services (6).

4. We must take special note of the presence of a state-county program for mental health services, which is financed by a state-county contribution of funds on a 90 to ten basis and which makes possible such contract services as ours (7, 8).

These favorable conditions certainly now exist in other communities in California and across the nation. In our opinion, however, they are not sufficient in themselves for the creation of a mental health center along the private practice model. In addition, at least four familiar schisms in professional practice must be bridged. They are as follows:

Schism I: Isolated private office practice versus closed-staff private psychiatric hospital practice;

Schism II: Office practice of psychiatry versus traditional medical practice centered in general hospitals;

Schism III: Private fee-for-service office and hospital practice of psychiatry versus public psychiatric services in hospitals and clinics with salaried professional personnel; and

Schism IV: Patient-centered psychiatric treatment services versus community-centered mental health promotion and preventive services for specific population groups.

Privately practicing psychiatrists have welcomed the opportunity to become members of a "community of professionals" based at the general hospital. In the 1950s and early 1960s, private patients who required hospitalization were usually referred to one of several private sanitariums in the community. Patients without financial means were referred to the county hospital or directly to the state hospital. These institutions, with traditionally closed staffs, took complete medical and psychiatric responsibility for the patient until he was returned to the community.

This situation (schism I) contributed to breaks in continuity of care for psychiatric patients despite encouragement by the private sanitariums and public services for the referring physician or psychiatrist to follow his patient during the course of hospitalization. Thus private psychiatrists welcomed the opportunity to attend their own patients in a therapeutic milieu (mental health unit) in the general hospital, with easy access to professional colleagues, both psychiatric and nonpsychiatric, and ease of involvement of patients and relatives in the therapy program. For these psychiatrists the private sanitariums and state hospitals have thus become a valuable resource for selected patients, and the general hospital setting has become a new resource suited to a wide spectrum of individuals in need of a short-term stay in a therapeutic milieu as part of their treatment.

There has traditionally been a wide schism (schism II) between the general medical and the psychiatric communities, with minimal use of psychiatric consultation and referral and, after referral, little continued involvement of the nonpsychiatric physician in treatment and planning for aftercare. It was this schism that led the physicians at Peninsula Hospital and Medical Center to enthusiastically support the establishment of an inpatient psychiatric unit in the hospital and to insist that nonpsychiatric physicians be allowed to admit patients to the unit for the social milieu and group psychotherapy provided by the center. Strong feelings were expressed that the inpatient unit should not adopt the tradition of separate inpatient and outpatient attending physicians and therapists (schism I) and that it should avoid the nonpsychiatric physician's lack of involvement (schism II).

Communication between psychiatrists and nonpsychiatric physicians has greatly increased at Peninsula Hospital since 1964. Many more consultations occur, with psychiatrists visiting such areas as emergency services, intensive care, coronary care, orthopedic rehabilitation, and pediatrics. Psychiatrists who had rarely left their offices now attend staff meetings, see patients in the hospital as consultants, and, of most importance, are continuing to treat their regressed patients with the aid of a team of mental health professionals in a therapeutic milieu. An increasing number of nonpsychiatric physicians have learned how to work with the therapeutic community and have remained with their patients, thus providing continuity, support, and remarkably good aftercare planning. At times this has been a slow and painful process, but it is important to note that *there has been no alternative to collaboration available.* No one else will take responsibility for the patient except the admitting physician and other attending physicians who may be called in by him, the patient, or the family.

Psychiatrists have been acutely aware of the isolation between the private sector and public mental health ser-

vices and of the existence of two patient care systems, public and private, at the state level as well as at the local level (schism III). Feelings have been strongly expressed by our psychiatrists that there should be one standard of care, care close to home, and continuity of care. There should be a broad range of community services available to everyone regardless of financial status, adequacy of health insurance, or severity of illness. Our goal has become one of eliminating the indigent patient concept and separate facilities for persons who receive public financial assistance for needed psychiatric care. With our system of fee-for-service with third-party payments, financial eligibility and manner of payment become more simply a matter of concern only to the finance office.

There is a single facility and standard of care for all in the community. We can thus avoid the long waits in clinic corridors and impersonal responses familiar to many in years gone by—conditions that remove from patients their dignity and sense of personal worth. The feeling of self-worth incorporated in our system can be seen as an essential element of our treatment program, and it probably explains in part the acceptance of our approach by the users and the community as a whole.

Indirect mental health consultation and education services and the involvement of the community in direct services through collaboration in many joint endeavors and at many different levels are now serving to bridge schism IV, the gap between mental health professionals and other human service professionals in the community.

IMPLICATIONS FOR THE 1970s

The fact that a comprehensive community mental health center can be developed by private practitioners gives us hope that mental health programs and psychiatric patients can indeed be included in first-class programs and as first-class patients in a national health plan. Third-party payments for services rendered, accountability through peer review, and fiscal responsibility and periodic audit of clinical and community programs with the application of cost-benefit analysis will highlight health care services in the 1970s. We submit that private practitioners can develop community-based clinical and community services that meet these requirements for health care delivery in the 1970s. Furthermore, the cost is no more and perhaps will prove to be significantly less than the cost of comparable services provided by public clinics and hospitals.

We hope that other communities of professionals will join in similar efforts to develop new types of mental health delivery systems, which can use the skills and interests of the increasing number of privately practicing mental health professionals across the country.

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Answers to Questions of the Month

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Problems Associated with the Introduction of a Psychiatric Unit Into a Rural General Hospital

BY SANFORD BLOOMBERG, M.D.

The author describes the establishment of a psychiatric unit in a rural general hospital in Massachusetts and some of the problems that arose in the first two years; particular attention is paid to the interaction between the psychiatric unit and the hospital's medical staff. Emphasizing psychiatry as a medical specialty and attempting to relate psychiatry to traditional medical values were vital in coping effectively with the problems.

THE ESTABLISHMENT of a psychiatric unit in a rural Massachusetts general hospital in September 1969 met with many challenging problems. Conflicts emerged in the clinical, administrative, and social aspects of hospital and community functioning. This paper will confine itself to discussing the interaction between the psychiatric unit and the medical staff of the hospital. Resolution of the problems arising out of this interaction is continuing; it involves concepts of professional identity, differences in social consciousness between psychiatric and other physicians, and what may be termed a generation gap between a relatively young multidisciplinary mental health team and an older, traditional medical staff.

THE SETTING

Greenfield, Mass., is the county seat for an area of about 750 square miles with a total population of 60,000. The hospital is a private, nonprofit voluntary general hospital with 215 beds in a town of 18,000. Prior to the establishment of the psychiatric unit, the hospital staff's contact with psychiatry had revolved around one psychiatrist in the immediate area whose duties included directing an alcoholism clinic and a state-supported mental health clinic. The active and courtesy medical staff at the hospital consisted of 62 physicians, most of whom were overworked. The administration of the hospital, supported by a lay board of trustees, was more progressive and community oriented than an important segment of the medical staff. Some of the younger physicians on the hospital staff had been trying without success to induce recent medical school graduates to come to Greenfield. The nearest major medical center was 100 miles away in Boston.

From its inception the psychiatric unit was based on the concept of the therapeutic community (1, 2). Individual therapy, group therapy, psychodrama, and occupational-recreational therapy were offered within a context of utilizing the total social structure of the unit. Emotional distress was seen primarily as the result of interpersonal and social experience. A knowledge of intrapsychic dynamics was constantly used in planning individualized treatment and in clinical decisions, but group and interpersonal interaction remained the focus in therapy. A multidisciplinary mental health team shared responsibility for directing daily activities and managing the patient group; patient participation in decision making occurred only in certain selected areas. Through a system of clinical and supervisory conferences, medical responsibility for the therapeutic program always prevailed. However, this medical direction was not always clearly recognizable to those accustomed to more traditional medical models of responsibility and decision making (3).

PROBLEMS IN INTERACTION BETWEEN PSYCHIATRISTS AND OTHER PHYSICIANS

Almost immediately after the establishment of the psychiatric unit, friction was noted in the matter of requests by psychiatrists for consultation with nonpsychiatric physicians. These physicians were invited to consult on the psychiatric unit concerning medical complications observed during the psychiatric patient's stay in the hospital. The purpose of these consultations was to bring experienced medical care to the patient. It was also hoped that more frequent contact between the medical staff and the psychiatric staff would make each group more comfortable with the other.

But the results of these consultations were unsatisfactory. Within a few months nonpsychiatric physicians, especially general practitioners in the older age group, began ignoring requests for consultation. It was apparent

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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that the environment of the therapeutic community caused them discomfort. In addition, contact with patients who were severely disturbed or withdrawn seemed to interfere with these physicians' medical judgments. The nonpsychiatric physicians as a group also felt that requests for consultation regarding minor medical conditions did not warrant their taking time from their busy schedules. On the other hand, the psychiatrist showed his reluctance to deal with medical problems, which for years prior to his assuming the position as director of the psychiatric unit he had shunned in his office practice.

Difficulties between the personnel of the psychiatric unit and the medical staff also emerged during the transmission of orders from the consulting nonpsychiatric physician to the psychiatric nurse. Members of the nursing staff of the psychiatric unit had been encouraged to contribute to discussions of the care and management of psychiatric patients at clinical and supervisory conferences. During inservice training conferences nurses had been urged to ask questions concerning the rationale of medical orders and the psychiatric direction of chemotherapy and psychotherapy—in fact, the entire treatment program. When the family physician would order medications and give other instructions concerning the management of medical conditions that might be at odds with a patient's psychiatric treatment plan, the nurses would ask the physician about possible untoward side effects. Some physicians who had an authoritative approach could not tolerate what they interpreted as a challenge to medical judgment. In addition a nurse, because of her own need to control and manipulate, sometimes provoked a justifiable objection by a physician to her interference with his medical prerogatives. The unit supervisory system dealt immediately with such personality problems, but there was no such vehicle to deal with the irate physician.

Another area of disagreement in the relationship between the unit and the medical staff was the objection of the family physician to the requirement that he relinquish psychiatric management of his patient to the director of the psychiatric unit. At times a close relationship, developed over many years, had to be interrupted when the care of a patient with an acute psychiatric disorder was assumed by the psychiatric staff. The classical family physician-patient relationship was not effective in dealing with psychiatric problems that demanded an approach which the family physician, because of lack of training or personality structure, was not capable of. Many general practitioners refused to give up their control and continued to admit their psychiatric patients to the hospital's medical service. The underutilization of the psychiatric unit during its first year was demonstrated by the fact that 131 patients were admitted to the unit while 156 patients with a primary psychiatric diagnosis were admitted to the general medical service.

Needs of a nature that could not be met by older physicians were seen especially among the younger patient group. A significant number of young people coping with identity problems demonstrated symptoms indicating their struggle to resolve ambivalent feelings and thoughts about the environment in which they found themselves. The therapeutic community was especially helpful in the resolution of such conflicts. But grave concern arose in the minds of older, traditional physicians when the values and attitudes so important to them were subjected to open discussion and often rejection by patients in the psychiatric unit. Authoritative advocacy of standards of any kind was incompatible with the encouragement of self-assertion, independence, and autonomy within the ground rules of the psychiatric unit. Several physicians became convinced that a referral to the psychiatric unit was a prescription for emotional and political license.

The rationale for short-term stays on the psychiatric unit was another source of misunderstanding. The unit was part of a comprehensive community mental health center, which included among its components a state hospital 20 miles away. The role of the general hospital psychiatric unit in the total program was diagnosis, crisis intervention, and disposition. The therapeutic community program was designed to educate patients to deal with a crisis in their lives during a relatively brief separation from their families. Instituting marriage counseling, family therapy, and individual psychotherapy succeeded in returning most patients to their homes in one to four weeks. Other patients requiring a longer period of hospitalization to become involved in a therapeutic program remained on the unit up to three months. Patients with chronic, intractable characterological or psychotic conditions requiring periods of hospitalization longer than two to three months were transferred to the state hospital or to a private psychiatric hospital 25 miles away.

Distinguishing between the indications for long-term and those for short-term hospitalization was difficult enough for the staff of the psychiatric unit (4). For family physicians, with vague concepts of emotional disorder, the differentiation made by the psychiatric staff appeared arbitrary at times. Physicians who had developed a close relationship with their patients considered a recommendation for hospitalization in a long-term facility an abandonment of the patient. In addition, the concept of limited treatment goals and a return to the community of chronic patients with irreversible impairments in ego function was troublesome to some physicians.

Structural and Program Changes

The alienation between the psychiatric service and the medical services found an opportunity for expression in areas less directly related to patient care. For instance, the structural and program changes implemented by the administration affected other departments in the hospital, including radiology, electrocardiography, pathology, and the ambulatory care unit. Familiar routines, office locations, and rounds were significantly altered. A group of internists was allowed to renovate an old building adjacent to the new hospital structure and move their private offices onto the hospital grounds. Renting office space to private practitioners on hospital grounds was a radical departure from a policy of noninvolvement by hospital authorities in the private practice of medicine. Rancor at these changes and inconveniences was not infrequently

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displaced onto the fact that the psychiatric unit was there.

The discomfort was further provoked by the role diffusion in the psychiatric unit's therapeutic community: functions previously identified with psychology, social service, and nursing as separate disciplines were frequently shared and exchanged among these disciplines. Patient and staff participation in decisions about leaves of absence, discharges, and modes of therapy was equally disquieting to physicians who felt a threat to their omnipotent role in patient management. The concept of psychiatric supervision of other mental health disciplines and the delegation of responsibility for patient contact and treatment were novel in their experience. Psychiatric-medical supervision and responsibility were exercised firmly but so unobtrusively that they seemed nonexistent to physicians accustomed to issuing peremptory orders to nurses on hospital medical wards. The values and mode of operation with which the physician had always identified himself seemed to be cast aside within the therapeutic community.

Another major area of conflict for those members of the medical staff who looked askance at psychiatry was the issue of therapeutic abortion. In the year preceding the establishment of the psychiatric unit, two therapeutic abortions for psychiatric indications had been performed. In the year following the psychiatric unit's entry into the hospital, eight therapeutic abortions were performed. Psychiatry was associated in the minds of opponents of such procedures with a breakdown of morality and the loss of medical control of a medical procedure.

A movement toward stiffening the hospital regulations on therapeutic abortions gained ground. A recommendation was made to change the requirement of three consultations with staff physicians, with two affirmative consultations needed for therapeutic abortion, to four consultations with unanimous approval. The president of the medical staff appointed a committee that included the director of the psychiatric unit to study the matter. The frequently observed difference between psychiatrists and nonpsychiatric physicians in personality structure and in social and political attitudes again became clear (5–8). Psychiatrists' awareness of the cultural, sociological, and political factors in the issue was considered irrelevant or in opposition to the conviction of conservative physicians that the physician alone must control the decision for medical procedures such as abortion. Attempts to differentiate psychiatric indications from psychiatric reasons for therapeutic abortions also were met with skepticism (9). The psychiatric unit became identified with the "liberal" view of therapeutic abortion.

EFFORTS TO DEAL WITH THE PROBLEMS

The difficulty encountered in inviting general practitioners onto the psychiatric unit was reduced as the psychiatrist became more comfortable in treating minor medical ailments and in ordering diagnostic laboratory procedures to rule out significant medical disease before requesting consultation from nonpsychiatric physicians. The tendency then developed to call on physicians in the medical specialties rather than on general practitioners; the comfort and cooperation of the specialists, especially the internists, had always been remarkable compared to that of the general practitioners. In addition, the psychiatrist called for a review of the consultation policy throughout the hospital in order to exert some pressure on other physicians to respond to fewer but more appropriate psychiatric requests for consultation. The result was a reasonably satisfactory resolution of the consultation problem.

In its second year of operation, the psychiatric unit expanded to a second floor. Sixteen beds remained in the therapeutic community, and 12 beds on the second floor were designated for patients whose problems had been shown from experience not to respond to a therapeutic community. A more traditional, less intensive psychiatric milieu was created. Nonpsychiatric physicians were encouraged to maintain primary responsibility for their patients while consultation with the psychiatry, psychology, social work, and nursing services was made available. In addition, patients with psychiatric problems who were recovering from surgery or who had concomitant physical conditions requiring treatment were considered appropriate candidates for the second floor; their treatment was the responsibility of their attending physician.

In the second year of operation, with the addition of the second-floor program, 328 patients were admitted to the psychiatric unit, 58 patients were admitted to the second floor and cared for by their attending physicians, and 162 patients with a primary psychiatric diagnosis were admitted to the general medical services by their own physicians. A significant factor in the increased utilization of the psychiatric unit was the greater community acceptance of the unit and the enlargement of its catchment area.

The problem of the differences in personality and social outlook between the psychiatrists and the other physicians, as demonstrated in the treatment approach to younger patients, was more difficult to solve. This area was closely related to the mode of operation of the therapeutic community, which seemed to threaten the nonpsychiatric physician's value system and professional identity. Members of the therapeutic community staff were encouraged to become more tolerant of the value system of the medical staff. Unjustified and personally determined challenges to medical prerogatives were handled directly and firmly in supervisory conferences. Efforts to educate the medical staff about the drug scene, the youth culture, and the unobtrusive but definite medical responsibility for the therapeutic community program were less successful. Weekly inservice training sessions and a clinical staff conference were instituted for this purpose. Both were unsuccessful. Lectures and discussions in which psychiatric jargon was used held little meaning for the medical staff. Physicians who attended frequently led the discussion into medical matters that were meaningless to the nonmedical staff present. It was clear that to be effective, any education program for physicians had to be conducted with a medical orientation and termi-

nology, and had to be carried on without the presence of nonmedical personnel.

These efforts were discontinued. The psychiatrist began a campaign of informal hospital corridor meetings, socialization at a weekly coffee hour for doctors, attendance at medical staff meetings, and personal explanations to those physicians who appeared to have been disturbed at their experience on the psychiatric unit. The goal of educating most of the physicians about the purposes and expectations of the psychiatric unit seemed to be reached. During periods of socializing, discussions frequently took place about the drug scene, the youth culture, and psychiatric supervision of nonpsychiatric personnel to carry out treatment within their ability and training. The physicians who had been most persistent in their negative attitudes remained on the periphery of these exchanges. But a wider and wider circle of goodwill and mutual understanding began to develop. No-fee psychiatric consultation in the general hospital and outpatient evaluation for patients of the medical staff were offered. Consultation and evaluation notes and letters were designed as devices to teach about psychiatric disorders and about the psychiatric unit's program. Evidence emerged that the nonpsychiatric physician was gaining an understanding of the differing indications for short-term and long-term inpatient hospitalization and for outpatient treatment.

Little more than a discrete neutrality in the intrahospital struggles for power over policy changes was thought appropriate for the psychiatric unit. The threat to medical omnipotence posed by the delegation of responsibility to nonpsychiatric personnel was partly reduced by the measures already described. In addition, nonmedical personnel were encouraged to communicate changes in psychiatric management to nonpsychiatric physicians. The contacts emphasized the fact that the program was directed by a psychiatrist. The increased personal contact also helped relieve the discomfort each group felt with the other.

In dealing with the matter of therapeutic abortion, psychiatry's identification with the medical profession came into question. But the experience on this psychiatric unit overwhelmingly argued for inclusion of mental health within a total health care system. Mixtures of physical and emotional problems were so frequent that to divorce psychiatry from medicine was unthinkable. In order to maintain an identification with medicine, an effort was made to understand and relate to "traditional medical values, concepts of illness, role definition, and institutional lodgment" (10). Psychiatry, operating within a comprehensive community mental health program of which this psychiatric unit was a part, was seen not as an innovative force in our society but was represented in its traditional role as a medical specialty. To take any other stance, it was thought, would be to make psychiatry's continued identification with medicine extremely difficult. In the controversy over whether to make a therapeutic abortion more difficult to obtain, the psychiatrist took the position that abortion on demand was a social and political question, to be decided by legislative and judicial action (11). Notice was served that on this unit psychiatry would not be used to bring about social change. Adherence to psychiatric indications for abortion within existing law would be the criterion for recommending therapeutic abortion, and economic and social reasons for abortion would not dictate a positive recommendation. The effort to adopt a stiffer regulation of therapeutic abortion in the hospital failed when put before the full medical staff. After weeks of discussion, the regulations were in fact liberalized to state that the interruption of pregnancy for psychiatric reasons required consultation with one psychiatrist and only one other physician.

It is difficult to measure the effect of this controversy on the relationship between the psychiatric unit and the medical staff. It may perhaps best be described by the impression that physicians previously hostile to psychiatry became at least somewhat unsure of the basis of their hostility, and physicians of a more progressive stamp looked upon the psychiatrist as conservative. Physicians in between these groups had no apparent change in attitude. The psychiatrist certainly felt his medical identification more strongly then ever. The markedly increased utilization of the psychiatric unit by both the community and the rest of the general hospital seemed to indicate that psychiatry was being better accepted by a large part of the medical staff.

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Hospital Treatment of Borderline Patients

BY GERALD ADLER, M.D.

Staff members handling hospitalized borderline patients are challenged to offer them a new kind of experience rather than reconfirming the projections they are so expert in eliciting from people. The author describes an approach to treatment of these patients in which the staff attempts to handle its own retaliatory fury toward these patients because of their provocative behavior and is able to set limits in a nonpunitive way.

AN INCREASING LITERATURE is accumulating about the treatment of the borderline patient (1–6), clarifying the characteristics of this group of patients and broadening our understanding of the many problems that arise in their treatment. Many authors recognize that behavioral regression is a major danger in the hospital treatment of borderline patients (3, 6). This paper will discuss issues related to the hospital treatment of this group and focus on the patients' regressive potential, which can be especially manifest during hospitalization. It will also attempt to clarify why these patients often arouse intense feelings in the hospital staff. Such feelings can result in situations in which limit setting may be presented in a punitive, destructive way to the patient and the staff's wishes to work with the patient can end disastrously, with the patient viewed as bad, willfully misbehaving, and not worthy of further treatment. The dynamics of staff interaction in response to these patients that can lead to these results will be examined.

The word "borderline" is used to describe patients with a stable personality organization (5) as well as those who are in transitory states between neurosis and psychosis. In this paper I am referring to a group of patients who have certain fixed personality characteristics and who maintain an adequate capacity to test reality except under severe stress, when they can become transiently psychotic (1, 3, 5). When functioning optimally they exhibit many neurotic-level strengths. However, under stress, their overwhelming rage following a disappointment can lead to the emergence of primitive concerns of abandonment and mutual destruction. They often handle their fury in self-destructive, masochistic ways. They have low self-esteem, in part because of their primitive guilt, and tend to project this feeling of badness onto the world. They often see people as objects to gratify their needs, yet have extremely punitive superegos that torture them for their devouring wishes and fury.

They frequently describe feelings of emptiness, hopelessness, and helplessness. In part this is a result of their conviction of their own badness as well as a lack of a capacity to keep the image of good experiences with good objects within themselves. In contrast to many schizoid and schizophrenic patients, these individuals are often able to form rapid, intense, engulfing relationships from which they expect a great deal and are almost invariably disappointed. Hospitalization can be the stress that can lead to disorganization and behavioral regression since it can provide intense relationships, promise so much implicitly, and ultimately disappoint. The regressive behavior may include the emergence of clinging, demanding, and whining in relationships as well as negativism, along with self-destructive concerns and actions.

The increasing literature about these patients may be a result of the fact that more people with serious character disorders, many of whom can be classified as borderline (7), are appearing for treatment. In addition, there has been a great increase in well-staffed psychiatric units that can offer these patients intense relationships with staff members. In contrast to the barren, understaffed state hospital image, modern treatment units can provide the stimulus of a large pool of available staff members arousing expectations of immense gratification followed by fury, disappointment, and the behavioral regression already described.

Because these patients exhibit so many areas of strength and may appear to be psychoneurotic when they are first seen, the beginning of a behavioral regression is often interpreted by the staff as willful misbehavior: the patient is seen as a bad child rather than as an overwhelmed patient under great stress. The regressive behavior may occur only with staff members who most arouse their patient's longings, disappointment, and fury, further supporting the staff's contention that the patient is misbehaving. They may also arouse envy in the staff, who observe these patients as acting out their feelings of entitlement to receive unending gratification on their own terms. In addition, the patients are often expert at devaluing and provoking staff members and making

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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The author would like to acknowledge the help of Ms. Susan Bailis, M.S.W., Dan H. Buie, Jr., M.D., Paul G. Myerson, M.D., and Douglas F. Welpton, M.D., in the preparation of this paper.

them feel helpless (1, 2). The staff may ultimately feel furious and helpless in a situation where their every attempt to be helpful is rebuffed as the patient appears more regressed, demanding, helpless, hopeless, suicidal, and self-destructive. The staff response is often a retaliatory fury, resulting in the punishment of the patient when limit setting is attempted.

PROJECTIVE IDENTIFICATION AND SPLITTING

It is particularly important to understand the staff's tendency to punish these patients, since the impulse to punish is nearly unavoidable in anyone working with them. In addition to the reasons I have already described, projective identification and splitting are important phenomena that occur in the ward setting of patient-staff interaction. In projective identification, the patient attempts to get rid of a part of himself by placing it into an object, which may then persecute the patient. At the same time the patient feels depleted and empty (8). Another aspect of projective identification is that the patient has to expend much effort and activity to control the person who is the recipient of the projected part of the patient; if the patient does not control this person, he then feels in danger of being overwhelmed by the part projected onto that person (5).

The relevance of this discussion of projective identification to the staff's tendency to punish these patients is as follows: staff members, when they are the recipients of projected parts of patients, tend to act like those projected parts. I do not mean that they receive projections in a literal sense but that they react to the fantasied projections of the patient because of complex factors: 1) the staff member responds to the projected part empathically since it reverberates with a similar but more submerged and often less destructive part in himself and 2) the actions and interactions of the patient with the staff members tend to provoke a response in the latter (especially around the patient's need to control them) that brings this submerged part of the staff members to the surface, with the tendency for it to be acted upon.

Splitting is related to projective identification. In the phenomenon of splitting, positive aspects of the patient that are separated from his negative aspects (both are derived from positive and negative internalized interactions with early objects) are projected onto different people (5). On a psychiatric unit, different staff members may be the recipients of different split parts from the patient. As described above, different staff members will tend to act toward the patient in ways consistent with the fantasied projection they receive from the patient.

The implications of projective identification and splitting are profound. Staff members who are the recipients of cruel, punishing parts from the patient will tend to react to the patient in a cruel, sadistic, and punishing manner. Staff members who have received loving, idealized projected parts of the patient will tend to respond to him with a protective, parental love. Obviously a clash can occur between these two groups of staff members. These mechanisms also help to explain why different staff members may see the same patient in very different ways.

It is an important observation that people who usually function on a high level of integration in many areas can feel and act in regressive ways in group settings, especially when there is a lack of structure or a breakdown in the group task (9, 10). In the hospital setting, this observation is consistent with the experience that staff members have the tendency to act empathically on projections they receive from patients. Since patients can project different parts onto different staff members, an internal drama within the patient can become a battleground among the staff. And amazingly, staff members begin to act toward one another as if each one of them had the only correct view of the patient and as if the part the patient projected onto the other staff members were the only true part of those staff members. In addition, staff members compete to be the positive part of the patient's splitting; they can also be quite distressed to find themselves the recipients of the negative parts.

A Vignette

A brief vignette illustrates aspects of these complex mechanisms of patient-staff interaction. At a staff meeting a series of angry outbursts occurred among nurses, social workers, and occupational therapists about who would be responsible for supervising cleaning up after a family night (which involved dinner and a discussion group for patients, their families, and staff members). Repeated accusations and recriminations from one staff group to another centered around the feelings of each discipline that the others really did not care about them and did not really understand the burden of work they had, especially on the day that family night occurred. Interpretations of the personal problems of staff members began to appear. The heated discussion ultimately led to a detailed account about the specifics of clean-up.

It then became apparent that although the patients had agreed to assume responsibility for the preparation of food, serving, and clean-up, they tended to disappear during the day and after the meeting, leaving much of the actual preparation and clean-up to the staff. Instead of supervising, staff members were cooking and scrubbing pots. It became clearer that the staff members were fighting with each other while forgetting the origin of their problems, i.e., their difficulties in working with the patients. The patients were not expressing any direct anger about their reluctance to fulfill their agreed-upon participation in family night and their simultaneous wish to be cared for and fed by the staff. In its meeting the staff was oblivious to this reality. Instead they showed massive anger toward each other for not caring or doing enough for each other. Another factor was that the staff was uncertain how they felt about new programs such as family night, and about the importance of program changes to patients and their families.

Stanton and Schwartz's classical work (11) defined the deleterious effects of covert staff disagreement on patient care in hospitals. I have attempted to amplify their observations by clarifying how the primitive defense mecha-

nisms of borderline patients tend to bring about and accentuate overt and covert disagreements within the staff; this can lead to the staff's doing to the patient what the patient may fear most.

THE NECESSITY FOR SETTING LIMITS

How can we define and describe the requirements for successful hospital work with these patients, who have serious regressive potential? A major requirement is a unit's capacity to set limits empathically without punishing the patient, while clarifying with the patient and staff the complexities of patient and staff interaction. I have stressed these patients' expectations of so much in every situation and their ultimate disappointment, fury, and regression. The therapeutic environment must anticipate this occurrence and define a structure involving the unit as a whole and the staff participation on this unit.

A short-term unit, which is defined as such to the patient before his admission, directs itself toward limiting the "total-gratification" fantasy of these patients. Yet this alone is usually insufficient in a group of patients who are able to ignore and avoid facing reality when under stress. The staff therefore has the task of rapidly evaluating the patient and family, including a definition of the problem and recognition of the diagnosis of the patient and his regressive potential; a therapeutic approach that addresses itself to this potential must then be formulated.

This approach acknowledges the defects in the patient's observing ego, his incapacity to maintain distance about problems when he is overwhelmed, and his tenuous capacity to form a working alliance with the staff. But it also addresses itself to the expectation that these capacities can slowly be achieved. The evaluation of the patient will almost always give evidence of repeated expectations, disappointment, and self-destructive behavior following the disappointment. Staff members can help the patient see that this has been a pattern in his life and raise the question of whether he might repeat such a pattern as part of his hospitalization (7). Many patients can acknowledge this possibility when they are not approached punitively by the staff. The acknowledgment can become the first step in a tentative alliance between patient and staff to explore and anticipate early evidence of the repetition in the hospital. They can also explore the means by which a new kind of experience can be facilitated that includes the patient's increasing capacity to tolerate delay and his ability to put into words feelings that previously would be expressed by flight or regressive behavior.

Limit setting becomes an important part of any unit working with borderline patients. For in spite of everything I have outlined, many such patients will begin to regress in ways that staff definition and redefinition of the problems will not touch. In addition, many of these patients have had early experiences with parents who either literally abandoned them as children or were alternately abandoning and smothering (1). They spend much of their lives attempting to get the caring they feel was absent at significant times early in their lives, yet they provoke those they wish to protect them to punish and abandon them instead. Those who end up in the correctional system turn to society through its courts and prisons for controls. Those who choose the "mental illness" route can put a psychiatric unit to the test as to whether the unit can firmly protect and care, or whether it too will punish and destroy. The success or failure of limit setting on a psychiatric unit can depend on staff vigilance to control the tendency to punish and reject rather than to limit the behavior of the patient in a way that can become a corrective emotional experience.

Limit setting can also include discharging or transferring a patient who cannot be managed on the unit as well as helping him pay attention to the realities of his life: his family, friends, and work. Family meetings and home visits can help with these realities. Depending upon the staff's control of its tendency to be punitive, the limit-setting experience can be a rejection of the patient or a step in defining with the patient how the staff and patient can work together and, if a transfer to another hospital or discharge is necessary, the beginning of a negotiation leading to a successful readmission. As already discussed, the demands and projections of these patients can lead to much splitting and angry disagreements among the staff members. Although time-consuming, frequent staff meetings can be crucial in developing trusting relationships among staff members so that patient projections and distortions can be readily recognized for what they are. It is particularly important for staff members working with these patients to know each other very well so that there is no question in a staff member's mind where another staff member stands on certain issues. When one staff member can think about another: "He could not possibly have said to this patient what the patient tells me," then he is in a position to avoid a situation of potential splitting and help the patient negotiate appropriately with the staff and even look at the nature of his distortion. Staff meetings also provide an opportunity for the staff to discover and evaluate incidents of overt or covert punitiveness toward these difficult patients.

CASE REPORT

I now want to illustrate how a difficult borderline patient taxed a psychiatric unit and almost succeeded in getting the unit to reject her angrily.

Case 1. The patient, a 25-year-old unwed mother of two small children, threatened to cut herself when her boyfriend of five years, who was the father of her children, threatened to leave. Her history included rejection by an aloof mother who sent her to an aunt for several years, and a father who drank and was emotionally unavailable. Since the age of 17 the patient had had repeated but brief state hospital admissions for wrist cutting, precipitated by the termination of relationships with men. She had not been hospitalized for the four years she had lived with her current boyfriend, although their relationship had been stormy and recapitulated aspects of her relationships with her parents.

Rubidium: Biochemical, Behavioral, and Metabolic Studies in Humans

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A growing body of experimental evidence indicates that rubidium possesses unique neurophysiological characteristics in animal systems, suggesting a need for investigating its antidepressant potential in humans. Lithium, an element in the same periodic series, has been used successfully in the treatment of mania. A number of studies have demonstrated that rubidium and lithium have contrasting behavioral, EEG, and biochemical properties. Over a period of 20 to 86 days, five depressed patients received varying doses of rubidium chloride, up to a maximum of 370 mEq. retained. No immediate or long-term side effects were recorded in this preliminary dose range. Behavioral and metabolic data are presented for these patients, along with a discussion of the safety factors.

RUBIDIUM, discovered in 1861 by Bunsen and Kirchhoff, is one of the Group 1A alkali metals belonging to the same periodic series as lithium, sodium, potassium, and cesium. It is widely distributed in mineral deposits and can be extracted from lepiodolite and carnallite rocks, which are also the major sources of lithium. The atomic weight of rubidium is 85; one of its isotopes (Rb^{86}) has been used extensively in tracer doses in medicine.

Rubidium is found in virtually all biological systems. Physiologically, rubidium most resembles potassium, and these two elements have a great degree of metabolic interchangeability.

The introduction of rubidium into human therapy (in the 1880s) as the bromide for epilepsy and the iodide for syphilis did not escape notice in the medical journals of that period. Thus, there exists a surprisingly comprehensive literature covering not only a 30-year history of the administration of rubidium to humans, but also an earlier body of animal and in vitro experimentation that laid the groundwork and provided the rationale for its introduction into clinical medicine.

Even without reviewing the early animal studies on rubidium emanating from the laboratories of Grandeau and Bernard in 1864 (1), Ringer in 1882 (2), Richet in 1382 (3), and Botkin in 1885 (4), it is apparent that numerous eminent physiologists and chemists from the 1860s to the 1880s worked enthusiastically with this new element.

PREVIOUS CLINICAL EXPERIENCE IN HUMANS

The first documented use of a rubidium compound in human therapy was with rubidium chloride, used by Botkin in St. Petersburg (Leningrad) in 1877–1888 on ten acute cardiac cases. Botkin reported his work in his doctoral dissertation, written under the supervision of the noted physiologist Ivan Pavlov and presented to the Imperial Biomedical Academy at St. Petersburg in 1888. Rubidium chloride was administered orally to humans with daily doses of approximately 1.6 gm., up to a total of 300 mEq.

The general effects observed in most patients were a slowing down of the pulse rate and an increase in blood pressure. Botkin attributed these effects to a direct influence of rubidium chloride on the centers of the vagus. Also observed several times was a notable improvement in the patients' subjective sense of well-being. At least 60 other well-documented trials of human rubidium therapy occurred in the late 1880s (5–8).

The whole 50-year history of the introduction of rubid-

Read at a New Research session at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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This study was supported by the Office of Research of the New York State Department of Mental Hygiene.

ium into human therapy has left curiously little trace at all in the records of medicine. The numerous researches into rubidium in the post-1918 period have not only concentrated entirely on animal experimentation in vivo and in vitro, but they appear to have no awareness that the element had ever been used previously in human therapy.

As far as we can tell from surveying the entire foreign literature of this period, no one ever died from taking rubidium; and, as reported by its users, it produced no surprising or irreversible side effects. If we take into account the number of well-known specialists who prescribed it in the large clinics during the 30 years of its medical use, rubidium was probably taken in one of its compounds by upwards of 1,000 people. Together with its potassium counterparts, it was finally phased out of medicine, not through any serious physiological disadvantages but simply because less empiric and more effective treatments completely outdated it.

Today, at the possible introduction of a new role for rubidium, its earlier and generally forgotten performance in medicine is certainly worthy of rescue from oblivion. It is noteworthy that the 1940 edition of *The Merck Manual* (9) still listed rubidium compounds in recommended dosages for use as an anti-epileptic, as a hypnotic, for nervous afflictions, and for external use in optic neuritis and conjunctivitis.

REDISCOVERY OF RUBIDIUM IN MODERN TIMES

Rubidium and lithium have contrasting behavioral, EEG, and biochemical properties. The first discovery of this in modern times was made by Meltzer and associates (10), who reported that rubidium increased the prevalent frequency of the EEG in monkeys and altered the behavior in the direction of increased activity. This group of authors went on to suggest that rubidium, like lithium, might therefore have application to modern psychiatric therapy, particularly in the affective disorders. Lithium, in contrast, had been shown to produce a slowing of the EEG in manic and nonmanic patients in studies reported by Platman and Fieve (11) and by Mayfield and Brown (12). These studies were soon followed by the biogenic amine studies of Stolk and associates (13), which indicated that rubidium enhanced the turnover of norepinephrine in rats whose biosynthesis of norepinephrine was inhibited.

The data of Stolk and associates suggested that greater amounts of neuronally stored norepinephrine were released by rubidium to central adrenergic receptors. In this study, the disappearance rate of labeled norepinephrine was increased by rubidium treatment, while concentrations of labeled normetanephrine increased up to fivefold in the rats treated with rubidium, as compared with controls. In contrast, previous studies with lithium had shown opposite effects, in that lithium appeared to increase the uptake of norepinephrine into synaptosomes (Colburn and associates [14]) and increase the intraneuronal metabolism of norepinephrine, as reflected by a decrease in normetanephrine with an accompanying increase in both deaminated and deaminated-methylated metabolite fractions (15, 16). These changes induced by lithium were interpreted to reflect a decrease in the concentrations of active norepinephrine at transneuronal receptors.

Stolk and associates (17) have since demonstrated that rats treated with daily doses of rubidium chloride showed increased levels of shock-elicited aggressive behavior when compared with controls treated with potassium chloride. Lithium, in contrast, was shown by Sheard (18) to decrease shock-induced aggression in rats, thus providing a comparison of the effects of these two salts on a common behavior.

In an independently performed behavioral study by Eichelman and associates (19), the effects of rubidium on shock-elicited aggression were likewise evaluated. This study sought to determine whether the rubidium effect was related to the cationic properties directly or to an effect on monoamine metabolism, since 6-hydroxydopamine also increases shock-induced aggression. Rubidium carbonate increased shock-induced aggression after 14 to 16 days of treatment, whereas cesium chloride failed to produce a similar effect. With rubidium treatment, the primary change was a 300 percent increase in norepinephrine turnover, whereas with cesium chloride the treated animals showed an increase in serotonin turnover of 40 percent, without major norepinephrine or dopamine changes. These authors concluded that the differing effects on brain amines of cesium and rubidium tend to implicate norepinephrine, rather than dopamine or serotonin, as a putative neurotransmitter in the behavior of shock-induced aggression. Rubidium, the authors concluded, thus seemed to be specific in altering norepinephrine metabolism and did not appear to affect serotonin metabolism, when administered in doses sufficient to cause aggression in rats without apparent toxic effects.

Of further importance are the balance studies of Relman and associates (20) in the 1950s, which indicated that when rubidium is fed to animals it replaces intracellular potassium mEq. for mEq. Relman and associates noted that when the total body burden of potassium in animals is replaced by rubidium to the extent of 40 to 50 percent, the animals become aggressive and hyperactive and finally go into convulsions and death.

Because the behavioral, biogenic amine, and EEG changes produced by rubidium can be described as "opposite" to those produced by lithium, and because rubidium appears to primarily affect intracellular potassium metabolism while lithium has its major effect on sodium metabolism (21), we hypothesized that rubidium may have an application in the research and therapy of the affective disorders or other psychiatric conditions. Despite the fact that rubidium salts were given to a number of patients in the 1880s, the medical observations collected at that time do not provide sufficient information to meet the legal and ethical requirements of contemporary Food and Drug Administration standards for Phase I and II investigations in the United States. Thus the clinical trials with rubidium in this country had to be preceded by

TABLE 1
Results of Acute Loading Studies with Four Subjects

Subject	Dose (mEq./liter)	Peak Plasma Rubidium		Peak Urine Rubidium*		Ratio of Red Blood Cells to Plasma Rubidium		Half Life** (Days)
		mEq./liter	Minutes After Dose	mEq./liter	Minutes After Dose	At Peak	At 24 Hours	
H.L.M.	4.1	.007	60			3.0***	†	55
	5.1	.015	70	.27	250			
M.H.	6.2	.018	60			3.5	20	49
	6.2	.024	90	.17	450			
E.T.	8.2	.041	45	.09	200	2.5	19	21
A.B.	8.2	.017	95	.14	160	4.5	20	21

*Samples collected at two-hour intervals. For subjects H.L.M. and M.H. the level observed was the resultant of the two doses administered.
**Calculated from urinary excretion during the period 13 to 24 hours after administration of rubidium.
***Approximate.
†Samples lost.

animal toxicology studies.[1] These results suggested that any study in humans involving doses larger than tracer doses must use oral administration, since rubidium is known to be lethal to animals when it enters the blood stream rapidly. A factor that further complicates clinical trials is that the biological half-life of rubidium is 50 to 60 days; this was determined first by tracer studies and later by our chronic loading studies.

METHOD

A metabolic ward is a prerequisite for studying the metabolism and drug kinetics of any of the alkali metals, such as rubidium. In addition, if the ward is located in a psychiatric hospital, concomitant measurements of behavior can be made for later correlations with levels of plasma, urine, cerebrospinal fluid (CSF), or other body substances. The experimental design that we chose for our Phase I pilot trials provided primarily for extensive medical observation and human safety. It also provided for the determination of the rate of entry of rubidium into the bloodstream and the subsequent urinary excretion rate, as well as recording concomitant behavioral measurements.

Part I of the study consisted of acute loading experiments, with intensive laboratory observations and observations of affective state being made on four subjects for a period of 24 to 48 hours following oral doses of rubidium chloride.

Part II of the study began with the intensive investigation of one unipolar and four bipolar patients over an extended period of time, during which the plasma rubidium concentration was slowly and safely elevated under conditions of controlled metabolic balance (a daily intake of 5 gm. of sodium plus 60–80 mEq. of potassium).

All subjects were volunteers—two normal subjects and seven depressed patients hospitalized in the Metabolic Research Unit at the New York State Psychiatric Institute. All subjects were free of complicating medical conditions, as determined by medical and neurological examination, blood chemistry, X ray, EEG, and EKG. Particular attention was directed toward the EKG, since rubidium is known to have an effect similar to that of potassium on heart physiology.

Prior to and subsequent to the ingestion of 1–1.5 gm. of rubidium within a four-hour interval, each subject in the acute study was monitored by continual EEG recording, frequent pulse and blood pressure measurements, tests of motor reflexes, EKGs, and observation of the clinical state, as well as collection of blood and 24-hour urine samples for electrolytes. Once the acute studies were successfully performed and safely completed, a series of one unipolar and four bipolar depressive patients were studied with chronic rubidium loading. In the chronic studies, patients were given oral rubidium chloride intermittently for 15 to 86 days, until an estimated cumulative total of no more than 370 mEq. of rubidium was retained. During all placebo and rubidium conditions, patients were rated on several behavioral inventories,[2] including a ten-point manic-depressive rating scale used by trained nurses, who were blind to the medications.

RESULTS

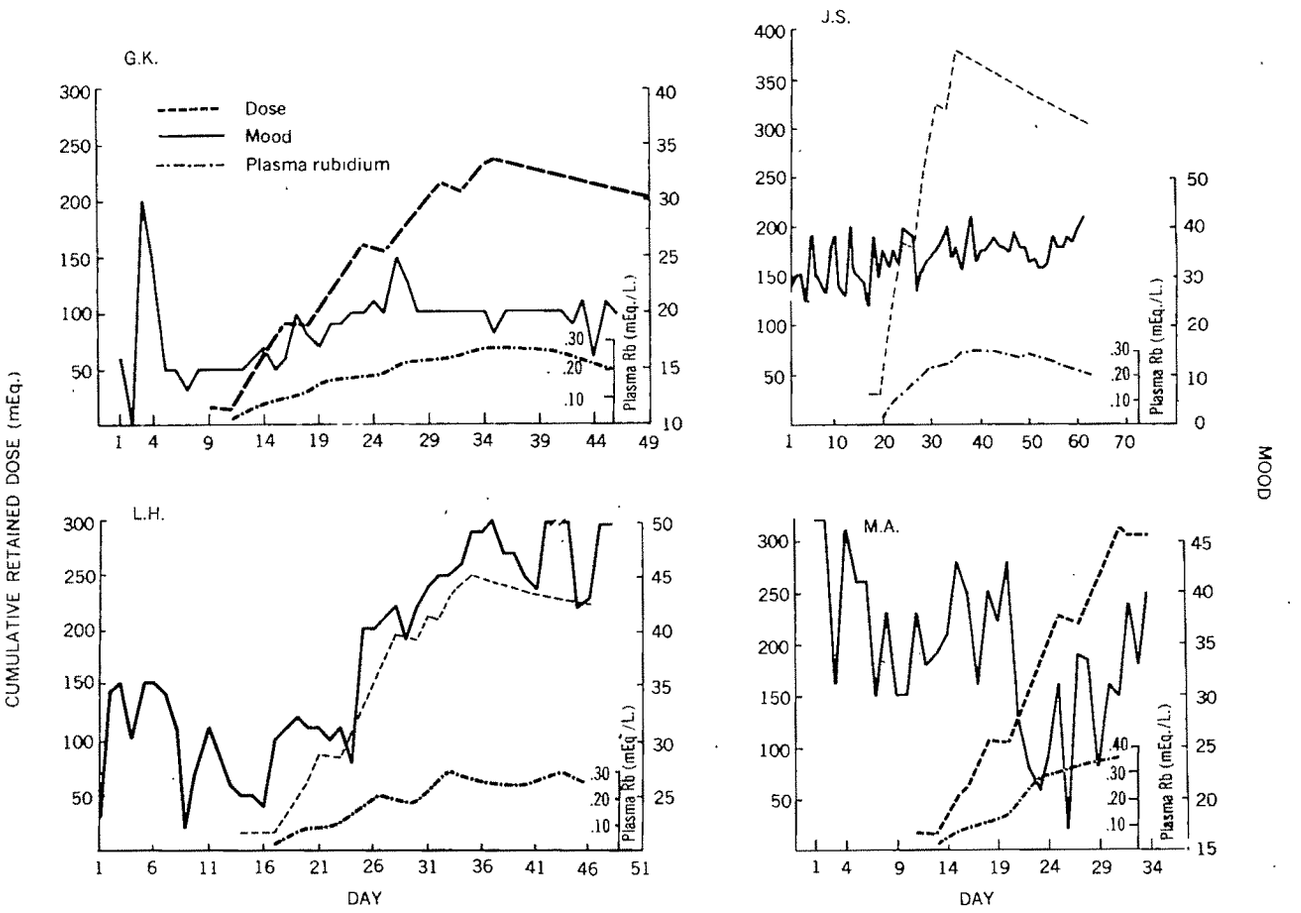
Acute Loading Studies

Table 1 shows that the peak plasma level of rubidium ranged between .014 and .041 mEq./liter per 8.2 mEq. ingested following acute doses of 0.5–1.0 gm. of rubidium chloride. These four subjects showed a minimal to moderate increase in the proportion of the lower frequencies of the EEG and no other changes, objective or subjective, in the acute study. The rubidium content of the urine of the normal subjects in these acute studies (the first two

[1] A bibliography listing these studies is available from the authors on request.

[2] Further information on these unpublished rating scales is available from the authors.

FIGURE 1
Chronic Rubidium Loading in Four Bipolar Depressed Patients



subjects in the table) during the second 12 hours of the 24-hour period was consistent with a biological half-life of 50 to 60 days (see table 1).

Chronic Loading Studies

Figures 1 and 2 illustrate the behavioral and metabolic data collected on unipolar and bipolar depressed patients who have been chronically loaded with rubidium chloride. As can be seen from the figures, the maximum plasma level obtained reached .30 mEq./liter (in patient J.S.; see figure 1) and the maximum cumulative rubidium chloride retained by this patient reached 370 mEq. No immediate or long-term side effects were encountered in any of these five chronically loaded patients and no consistent behavioral or affective changes were recorded at this preliminary dose range. Patient L.H. (see figure 1) came out of her depression during the rubidium trial, and patient J.S. reported subjectively feeling much better, although the behavioral scores obtained by the nurses did not clearly corroborate this. J.S. became seriously depressed and paranoid three weeks after the rubidium chloride was discontinued. Two other patients also appeared to have a depressive rebound three to four weeks after resubstitution of placebo. All patients have now been followed for from six to 18 months subsequent to their chronic loading trial without any reported adverse effects.

General Laboratory Data

All EKG tracings, liver function tests, electrolyte levels, blood urea nitrogen tests, complete blood counts, and urinalyses were consistently normal for the five patients loaded chronically.

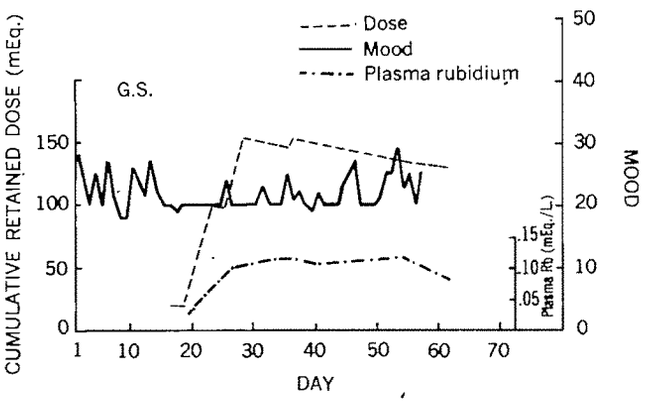
CSF Data

Figure 3 illustrates recent data comparing the rubidium content of CSF and blood plasma. Samples were taken at the indicated intervals after the last dose of rubidium chloride. The rubidium content of the blood plasma declined steadily, with an apparent half-life of about 34 days. In contrast, there was a transient increase in the CSF rubidium concentration, followed by a decrease, with a calculated half-life of 37 days.

Related Biochemical Data

Preliminary data on the biogenic amine metabolites in urine were also accumulated for patients J.S. and M.A. during a pre-rubidium placebo period, during the two

FIGURE 2
Chronic Rubidium Loading in a Unipolar Depressed Patient



weeks of rubidium loading, and during a two-week post-rubidium placebo interval. Free catecholamines, total o-methylated metabolites, and 3-methoxy, 4-hydroxymandelic acid (VMA) were measured in the urine of these two patients by the methods described by Crout (22) and Pisano (23, 24). There were no significant changes noted in the excretion pattern of these metabolites in the patients studied. These preliminary data suggest that rubidium treatment at the dose level employed does not modify the excretion pattern of these urinary biogenic amine metabolites. Urinary studies of 3-methoxy, 4-hydroxyphenylglycol (MHPG) are still in progress.

Preliminary studies of total body potassium (employing K^{40}) were also performed on a single patient (J.S.). These results tended to confirm the animal data of Relman and associates (20) that total body potassium is replaced by rubidium approximately mEq. for mEq. when the latter is ingested orally.

DISCUSSION

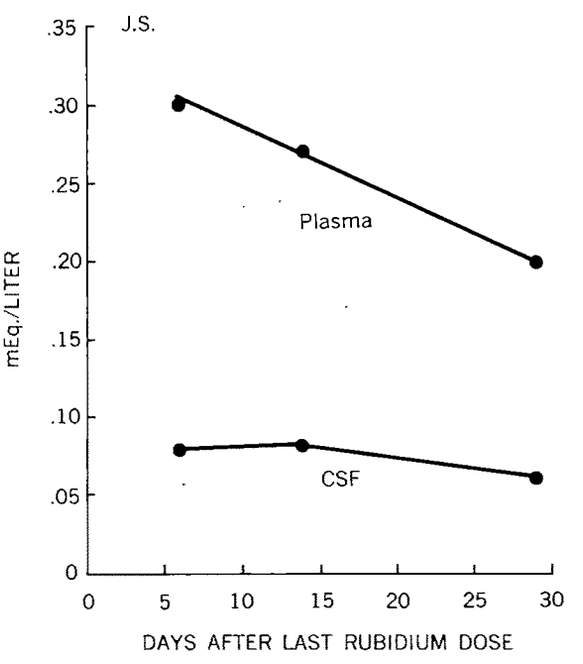
Rarely does one have an opportunity to begin a clinical trial of a potentially useful new psychoactive drug with the amount of information from the basic sciences that is available for rubidium. The results of EEG, biogenic amine, and behavioral testing of animals all point to an alerting or arousal effect, as well as aggression-inducing properties in animal paradigms. Rubidium studies performed in four independent laboratories (New York State Psychiatric Institute, Stanford University, University of Melbourne, and NIMH) produced agreement that rubidium exerts neurochemical and behavioral effects "opposite" to those of lithium, a proven and specific antimanic agent. Lithium produces a transient sodium, potassium, and water diuresis in both animal and human subjects and simultaneously corrects states of manic elation in humans. Lithium's effects on unipolar and bipolar depression, in contrast, have generally been much less impressive, thus prompting the continued search for a substance with specific antidepressant properties.

Most psychopharmacologists agree that the classic tricyclic and monoamine oxidase inhibiting agents are superior to placebo but not dramatically so. Furthermore, the onset of action of these drugs often appears to be delayed for ten days to several weeks and their side effects may be quite prominent. One can hypothesize that rubidium, if its use is therapeutic in depression, might offer the possibility of a "replacement-like" therapy for an as-yet-undiscovered biochemical defect or defects in one or more of the depressive subtypes, in the way that lithium appears to offer a specific "replacement-like" therapy for mania.

The significance of rubidium in basic pharmacology, behavioral pharmacology, and electrolyte physiology thus seems to be promising, due to its unique neurochemical and behavioral properties. Its application to clinical psychiatry and/or internal medicine is much less certain, but the potential of rubidium as a research tool or as a possible therapy in states of altered ionic balance in medicine or psychiatry now seems worth exploring.

Of foremost importance in the exploratory results reported in this initial trial with humans is the finding that the rubidium ion can be administered chronically to humans without evidence of toxicity. Furthermore, by means of balance techniques, accurate bookkeeping can be accomplished, so that a gain or loss of major or minor ions can be recognized. The monitoring of these ions, as well as behavior, allows one to conduct studies similar to the metabolic studies that have generated a plethora of research with the lithium ion. Interpretation of the preliminary data presented beyond this point must be made

FIGURE 3
Comparison of the Rubidium Content of Cerebrospinal Fluid and Blood Plasma



with extreme caution. Of the five patients chronically loaded with rubidium, a single patient clearly recovered from her depressive episode during the trial, while a second patient rated himself subjectively better during the latter phases of the rubidium loading, only to become psychotically depressed three weeks later after discontinuance of the ion when placebo was resubstituted. In the other three patients who were loaded chronically, there was no correlation between change in depressive affect or behavior and the rubidium loading, although the clinical course of two of these patients worsened three to six weeks after placebo resubstitution.

Preliminary findings with respect to the rubidium content of cerebrospinal fluid are of interest. The simplest explanation for the contrasting values obtained for CSF and plasma rubidium is based on the reasonable assumption that CSF represents the extracellular fluid of brain and that the higher rubidium concentration in the second CSF sample probably represents the continued accumulation of rubidium by brain. Although this interpretation must be regarded as preliminary, it should be noted that this is consistent with our animal data (not yet published), which shows that Rb^{86} continues to accumulate in rat brain, reaching a maximum at three days after injection, while the peak level occurs after one day in all other organs studied.

No conclusions can be made with respect to the preliminary biogenic amine studies undertaken in this report. In addition to the fact that the usual difficulties in interpretation of urinary amine data apply to the two patients (J.S. and M.A.) who were studied, it should also be noted that these negative results may have been due to the use of a dose level too far below the yet unknown level at which a therapeutic result may occur. We are now planning studies with depressed patients that will use a higher level of plasma rubidium and total cumulative rubidium intake; during these studies CSF and urinary amine metabolites, including MHPG, will also be analyzed. The decision to investigate amine metabolites and rubidium was prompted by the rubidium-induced biogenic amine changes in animal studies noted by Stolk and associates (13) and Eichelman and associates (19), referred to previously, as well as the urinary amine studies in humans reported by Greenspan and associates (25), which correlated lithium treatment, decreasing manic behavior, and changes in urinary VMA, normetanephrine, and MHPG.

The design of an experimental trial of a drug, such as rubidium, that has a long biological half-life (50 to 60 days) presents unique legal, ethical, and safety problems not heretofore encountered in clinical psychopharmacology, as well as special problems in the interpretation of results. The therapeutic effect of rubidium in a depressed patient can only be assessed by cautious stepwise increments in the plasma level and the total cumulative retained dose, with pauses that permit each new level to be correlated with clinical improvement and/or physiological or subjective side effects. A sufficiently large number of metabolic and behavioral observations at increasing doses of rubidium with single cases will be necessary to obtain the basic data required in Phase I and II clinical trials with this ion. Such raw phenomenological data will provide the basic data needed to establish the drug's effectiveness, ineffectiveness, and/or toxicity and tolerance levels in that illness. Should higher doses or more prolonged oral doses of rubidium result in a positive correlation between increased serum rubidium levels and decreasing depression scores, the hypothesis of therapeutic efficacy then becomes worth testing in a Phase III double-blind study with randomization of a sufficiently large number of patients to drug and placebo.

In conclusion, an extensive and exciting field of electrolyte metabolism in medicine and psychiatry still remains unexplored. In addition to future studies with rubidium, a number of other trace metal ions await exploration in basic and clinical psychopharmacology.

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Amphetamine Psychosis: A "Model" Schizophrenia Mediated by Catecholamines

BY SOLOMON H. SNYDER, M.D.

Because of its close clinical similarity to acute paranoid schizophrenia, amphetamine psychosis may serve as a useful experimental model for schizophrenia. Molecular and clinical studies suggest that both the schizophrenia-like symptoms of amphetamine psychosis and the specific ability of phenothiazines to relieve the symptoms of schizophrenia and amphetamine psychosis may be the result of interactions with dopamine systems in the brain. The author discusses some implications of the roles dopamine and norepinephrine may play in mediating some schizophrenic symptoms.

PSYCHIATRISTS HAVE for years sought an experimental, preferably drug-induced, "model schizophrenia." Many drugs elicit psychoses, but most are considered toxic, because the psychotic thinking is accompanied by confusion and disorientation.

Amphetamine psychosis has been suggested as a model for paranoid schizophrenia (1, 2). The simplest argument in its favor is that numerous patients with amphetamine psychosis have been misdiagnosed and mistreated, often for long periods, as paranoid schizophrenics (1–3). Another obvious similarity between amphetamine psychosis and certain forms of schizophrenia is the similarity in drug therapy. Phenothiazines, which have selective antischizophrenic activity (4), are also uniquely efficacious antidotes for amphetamine poisoning (5) and psychosis (6).

Because of the obvious chemical similarities, amphetamines have usually been assumed to exert most of their behavioral effects through interactions with one or the other of the brain catecholamines norepinephrine and dopamine. An abundance of recent research has enabled pharmacologists to ascribe specific behavioral effects of amphetamine to its effects on neuronal stores of the catecholamines and of phenothiazines to their actions on catecholamine receptors in the brain.

I will attempt to contrast the clinical features of amphetamine psychosis with particular forms of schizophrenia, to review the pathways of norepinephrine and dopamine neuronal tracts and their selective interactions with amphetamine and phenothiazines, and finally to point toward the possible relationships between some features of amphetamine psychosis and interactions of the drug with catecholamines.

CLINICAL FEATURES OF AMPHETAMINE PSYCHOSIS

There is little doubt that amphetamine psychosis can closely mimic paranoid schizophrenia. Beamish and Kiloh (3) provided detailed case histories of patients with amphetamine psychosis in which a misdiagnosis of paranoid schizophrenia was maintained for up to three years, during which time patients received courses of electroconvulsive shock and insulin coma therapy, all the while surreptitiously ingesting amphetamine in the hospital. Bell (2) described 14 cases of amphetamine psychosis, seven of which were first diagnosed as paranoid schizophrenia. Some authors, however, feel that certain differences permit differential diagnoses of these two conditions solely on clinical grounds (2, 7).

What are the major symptoms of amphetamine psy-

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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This work was supported by Public Health Service grants NS-07275 from the National Institute of Neurological Diseases and Stroke, GM-16492 from the National Institute of General Medical Sciences, and MH-18501 and Research Scientist Development Award MH-33128 from the National Institute of Mental Health.

chosis? Paranoid ideation, along with well-formed delusions, is a hallmark (1, 8). Delusions begin with a vague suspiciousness, followed by increasing ideas of reference. In studies of experimentally induced amphetamine psychosis, the psychosis proper began abruptly when the patients crystallized their heretofore vague apprehensions into fixed paranoid delusional systems (9, 10). Characteristic behavioral effects of amphetamine that may contribute to paranoid features of the psychosis include heightened awareness, an acute sense of novelty and curiosity, and the overwhelming fear and terror often displayed by heavy users of amphetamines (8).

A recently emphasized symptom of amphetamine addicts and psychotics is stereotyped compulsive behavior. Patients compulsively take objects apart, sort them, and put them back together again. They analyze details in a concrete and repetitious manner. Often patients pace back and forth and move their mouths from side to side in a stereotyped grimacing pattern. Stereotyped compulsive behavior may be an invariable concomitant of psychosis, present only in those amphetamine addicts who develop psychosis (8).

A majority of patients with amphetamine psychosis experience visual and auditory hallucinations with a similar incidence (1–3, 8–10). The auditory hallucinations are very much like typical schizophrenic auditory hallucinations, with vague noises, voices, and occasional conversations with the voices (1, 2). This contrasts with the psychotomimetic effects of psychedelic drugs, which primarily elicit visual distortions. Still, the occurrence of a significant proportion of visual hallucinations in amphetamine psychosis can be construed as a feature distinguishing it from schizophrenia, since schizophrenic hallucinations are usually auditory (2, 7). On the other hand, visual hallucinations may be frequent in acute schizophrenics (11, 12), and visual hallucinations in amphetamine psychotics occur primarily in those who become psychotic acutely, often after a single large dose, while auditory hallucinations preponderate in patients whose illness developed gradually with chronic dosage (1).

Tactile and olfactory hallucinations occur frequently in amphetamine psychotics but rarely in schizophrenics. Tactile hallucinations often develop into delusional systems of small animals, worms or lice, or crystals of amphetamine that have been placed beneath the patient's skin.

Most amphetamine addicts report a change in sexual habits, with decreased sexuality in some patients, but more frequent and more striking alterations occur in the direction of sexual excess and perversities. Ellinwood (8) reported that sexual stimulation is associated selectively with patients who become psychotic. From his studies of Swedish phenmetrazine hydrochloride (Preludin) addicts, Rylander concluded that amphetamines are the most powerful aphrodisiacs known (13).

A key feature of amphetamine psychosis is the retention of clear consciousness and correct orientation. Indeed, most patients have a hyperacute memory for all events that transpire during their intoxication. It is also of importance that amphetamine psychosis is induced by the drug itself rather than by its withdrawal; symptoms abate as the drug is excreted (14).

Certain clinical features are conspicuous by their absence in amphetamine psychosis. Few patients display a formal thought disorder, a feature proposed as differentiating this condition from paranoid schizophrenia (2, 7, 15). Unlike most schizophrenics, patients with amphetamine psychosis also often manifest not a flat affect but rather a "brisk emotional reaction, usually in the direction of anxiety" (7).

Because amphetamine psychosis usually occurs in chronic heavy users of the drug, one may ask whether the psychosis is an effect of the drug or is merely secondary to sleep deprivation, "overstimulation," or precipitation of a latent schizophrenia. The experimental induction of amphetamine psychosis in volunteer human subjects has resolved some of these issues (9, 10). Griffith and associates (9) administered amphetamine at a rate of 10 mg. per hour by mouth every hour to four subjects, all of whom sustained an unequivocal psychosis between two and five days after the start of the experiment. The experimenters excluded from their study anyone with a prior history of amphetamine psychosis or schizoid or schizophrenic tendencies. Their ability to reproducibly induce a psychotic state therefore suggests that amphetamine psychosis is not simply a drug-activated latent schizophrenia. Two of the subjects became psychotic on the second day, at which time amphetamine administration was terminated, so that they lost only one night of sleep. This is too short a period of sleep deprivation to elicit psychosis, indicating that amphetamine psychosis is not attributable simply to sleep deprivation. Because the subjects in the study were depressed rather than stimulated after the first few hours of the experiment, the psychosis probably was not a product of "hyperarousal," although observable activity may fail to reflect internal hyperarousal.

In summary, patients receiving large doses of amphetamine frequently develop a psychosis that resembles paranoid schizophrenia. The clinical picture, however, differs in a number of ways from that of schizophrenia. Perhaps the differences are attributable to other "contaminating" amphetamine effects, such as central stimulation along with sleeplessness, anorexia, and sexual stimulation.

Recently, particular behavioral effects of amphetamines and phenothiazines have been linked to specific neurochemical systems. Such findings may help to clarify the pathophysiology of amphetamine psychosis.

NOREPINEPHRINE AND DOPAMINE PATHWAYS IN THE BRAIN

In searching for the biochemical mechanisms of amphetamine action, pharmacologists have a head start over research on most other drugs. Since amphetamine bears so close a chemical resemblance to norepinephrine and dopamine, most investigators attribute the behavioral ac-

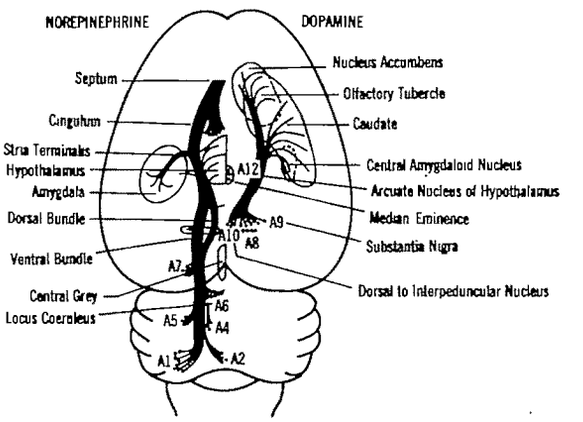
tions of amphetamine to one or the other of these two chemicals.

While amphetamine can interact with catecholamines in a variety of ways, most pharmacologists currently favor two mechanisms: a direct synaptic release and inhibition of reuptake inactivation (16). Reuptake inactivation refers to a process whereby synaptically released catecholamines are inactivated primarily by reuptake into the nerve endings that had released them. In either case, amphetamine potentiates catecholamine effects.

A major advance in understanding brain catecholamines was the development of a histochemical fluorescent technique whereby dopamine and norepinephrine could be detected and distinguished from each other in specific neurons in freeze-dried sections of the brain (17). The neuronal pathways containing these amines have been most recently and thoroughly mapped by Ungerstedt (18); see figure 1.

FIGURE 1

*Pathways of the Norepinephrine and Dopamine Tracts in Rat Brain**



*Adapted from Ungerstedt (18).

Norepinephrine Pathways

Ventral norepinephrine system. The cell bodies of this system occur in about four different groupings in the medulla oblongata-pons. Their axons ascend in the medial forebrain bundle, giving off terminals first in the lower brain stem, then in the midbrain, and finally in large numbers throughout the hypothalamus.

Dorsal norepinephrine system. The other major norepinephrine tracts have cell bodies in the locus coeruleus. Some fibers proceed downward to innervate lower brain stem areas, here overlapping with nerve terminals of the ventral norepinephrine pathway. A larger proportion, however, send ascending axons more dorsally than the ventral norepinephrine pathway (hence the "dorsal norepinephrine pathway") to innervate the entire cerebral cortex and hippocampus. Some axons, after leaving the locus coeruleus, enter the cerebellum. Interestingly, axons arising from single cells of the locus coeruleus may divide and send separate branches to the cerebral cortex, the hippocampus, and the cerebellar cortex. Thus a single neuron can influence these widely separated areas of the brain.

Dopamine Pathways

Nigrostriatal dopamine system. The best known dopamine tract has cell bodies in the midbrain's substantia nigra with axons ascending to terminate in the caudate nucleus and putamen of the corpus striatum. The nigrostriatal system is degenerated in the brains of patients with Parkinson's disease; the attendent dopamine deficiency appears to account for many parkinsonian symptoms (19).

The meso-limbic dopamine system. Dopamine cell bodies near the interpeduncular nucleus in the midbrain ascend along with axons of the nigrostriatal dopamine system but diverge to give off terminals in the nucleus accumbens and the olfactory tubercle, two poorly understood parts of the brain.

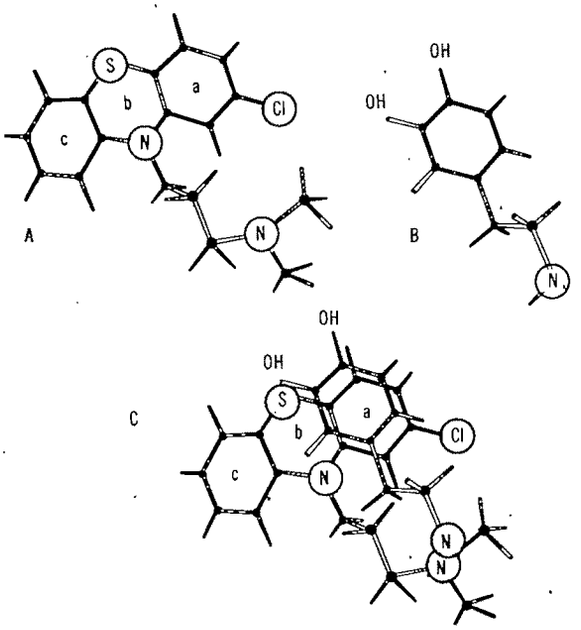
The tubero-infundibular dopamine system. Some dopamine cell bodies, located in the arcuate nucleus of the hypothalamus, send forth short axons that terminate in the median eminence. Impressive evidence implicates this dopamine tract in the regulation of secretion and synthesis of the trophic hormones of the pituitary gland (20).

Simply by knowing the course of the various catecholamine tracts one may make well-educated guesses as to which ones mediate particular behavioral effects of amphetamine. For instance, the medial forebrain bundle is well known as a "reward center" of the brain (21). Animals will press levers at astronomical rates just to obtain electrical stimulation in the medial forebrain bundle. Amphetamine greatly facilitates self-stimulation in the medial forebrain bundle (22). Since the ventral norepinephrine pathway accounts for the majority of catecholamine axons and terminals in the area of the medial forebrain bundle, it would be reasonable to suppose that amphetamine's effects on this tract account for the euphoriant, and conceivably the sexual stimulant, actions of the drug. The medial forebrain bundle's norepinephrine neurons may be responsible for self-stimulating behavior, since blocking the conversion of dopamine to norepinephrine inhibits self-stimulation there and since the suppressed behavior can be reinstated by intraventricular injections of norepinephrine (23).

Influences of the brain stem on the cerebral cortex are probably responsible for maintaining a state of alertness. Some years ago Bradley and Elkes (24) showed that the alerting effects of amphetamine are mediated by influences from the brain stem's reticular formation on cerebral arousal mechanisms. Perhaps the responsible site in the brain stem is the locus coeruleus and its fibers, by which norepinephrine ascends to the cerebral cortex. Conceivably, the norepinephrine fibers to the cerebellum account for the enhancement by amphetamine of motor coordination. Since alertness and muscle coordination are mutually interdependent processes, their interrelation might be subserved by the neuronal architecture whereby single norepinephrine neurons in the locus coeruleus pro-

FIGURE 2

*Structural Similarity of Chlorpromazine and Dopamine**



*Drawings are Dreiding models of the molecular structures of chlorpromazine (A) and dopamine (B), as determined by X-ray crystallographic analysis; part C illustrates how dopamine may be superimposed on a portion of the chlorpromazine molecule.

ject both to the cerebrum and to the cerebellum.

The therapeutic efficacy of L-dopa in Parkinson's disease appears to depend largely on its decarboxylation to dopamine, which ameliorates the dopamine deficiency in the brains of these patients (25–27). Dextroamphetamine has been employed as an effective therapeutic agent in Parkinson's disease (28, 29). It may act by potentiating the limited amounts of dopamine remaining in the brains of parkinsonian patients.

The functions of the meso-limbic dopamine system are obscure. One might hypothesize that the meso-limbic terminals in the olfactory tubercle play a part in the olfactory hallucinations that frequently occur in amphetamine psychosis.

INTERACTION OF PHENOTHIAZINES WITH DOPAMINE RECEPTORS

Just as the obvious chemical similarities of amphetamines and catecholamines portended their pharmacologic relationships, recent findings of a more subtle resemblance of catecholamines and phenothiazines (30) may explicate certain therapeutic effects of the phenothiazines. In this case the pharmacologic data preceded the chemical observations.

It has already been mentioned that the phenothiazines, which are selectively antischizophrenic, are also potent antidotes to amphetamine psychosis. Phenothiazines alter dopamine metabolism in a fashion that suggests that they block dopamine receptors in the brain (31–33). Although phenothiazines can also block apparent norepinephrine receptors, their potency in blocking dopamine receptors is much greater than their norepinephrine-blocking capacity (31–33). Because the antipsychotic and dopamine-blocking potencies of phenothiazines are closely correlated, it has been suggested that the antischizophrenic activity of these drugs is related to the blockade of dopamine receptors at one or another of the dopamine tracts in the brain (34, 35).

Horn and Snyder (30) recently observed a close similarity between the preferred conformations of chlorpromazine and dopamine, as determined by X-ray analysis (figure 2), which indicates a possible molecular mechanism by which phenothiazines block dopamine receptors and which accounts in part for several clinical features of phenothiazine action.

The similarity of the dopamine conformation to part of the chlorpromazine structure accords with the possibility that phenothiazines may exert their clinical effects by interacting with dopamine-related sites. If this is so, the ability of phenothiazine drugs to assume the dopamine-like conformation should be related to their antischizophrenic activity, a prediction borne out in analysis of molecular models (30). For instance, a substituent at position 2 of the *a* ring of phenothiazines is crucial for antischizophrenic activity (36). Without an *a* ring substituent, rings *a* and *c* would be almost symmetrical, with the side chain presumably fully extended, and the resultant compound would therefore be less likely to assume the dopamine-like conformation. If antischizophrenic activity is determined by the blockade of dopamine receptors, one would then predict that phenothiazines lacking the *a* ring substituent would be less effective antischizophrenic agents. Of all the phenothiazines widely used in treating schizophrenia, only promazine and mepazine lack the *a* ring substituents, and these two agents are significantly less clinically efficacious than those that do contain an *a* ring substituent.

Another major requirement for the antischizophrenic activity of phenothiazines is that the side chain amine group be separated by three carbon atoms from the ring system. Molecular models indicated that shortening the side chain to two carbon atoms would make the assumption of the dopamine-like conformation less likely (30). Accordingly, it is of interest that phenothiazines with side chains of two carbon atoms, such as the antihistamine promethazine (Phenergan) and the antiparkinsonian agent diethazine (Diparcol), appear to lack antischizophrenic activity (36). Other features of antischizophrenic activity of phenothiazine drugs explained by the resemblance to the conformation of dopamine (30) will not be described here.

BEHAVIORAL EFFECTS OF AMPHETAMINE IN ANIMALS

Resolving the multifarious actions of amphetamine requires knowing which of the catecholamines, and ulti-

mately which specific tract in the brain, accounts for each effect. In our laboratory the pharmacologic artifice of comparing d- and l-isomers of amphetamine has facilitated drawing some of these distinctions. D-amphetamine is ten times as potent as l-amphetamine in blocking the reuptake of catecholamines by norepinephrine neurons but is about equal to l-amphetamine in acting on dopamine neurons (37–40). The same relative potencies of the amphetamine isomers also appear to hold for the amphetamine-elicited release of norepinephrine and dopamine (39, 41). Thus for the two major modes of amphetamine action—inhibition of reuptake inactivation and synaptic release—d-amphetamine is considerably more potent than l-amphetamine in affecting norepinephrine neurons, while the two isomers have similar potencies in affecting dopamine neurons.

Assuming that these biochemical actions are responsible for the behavioral effects of amphetamine, there emerges a simple way to determine whether a particular animal or human behavior involves brain dopamine or norepinephrine: if d-amphetamine is much more potent than l-amphetamine in eliciting the behavior, norepinephrine can be held responsible, but if d- and l-amphetamine show similar behavioral potencies, dopamine is implicated as the transmitter.

Earlier studies have reported comparisons of the two amphetamine isomers in evoking two behavioral effects of amphetamine in animals—locomotor stimulation and stereotyped behavior (38–40). At relatively low amphetamine doses, animals appear excited and will run around their cages at a furious rate, an effect that may mirror the central stimulant actions of amphetamine in man. D-amphetamine was ten times as potent as l-amphetamine in enhancing locomotor activity in rats, paralleling the ten-fold difference between these isomers in inhibiting the reuptake of catecholamines by norepinephrine neurons. This suggests that amphetamine-induced locomotor stimulation in animals, and possibly central stimulation in man, involves brain norepinephrine. Drugs that block the conversion of dopamine to norepinephrine diminish the locomotor stimulant actions of amphetamine, which also suggests that norepinephrine rather than dopamine mediates this behavior (42).

At somewhat higher doses, amphetamine elicits stereotyped compulsive behavior in animals, the exact pattern varying with different species. In rats, whose major means of exploring their environment is olfactory, animals stay in one portion of the cage, sniff, lick, and gnaw. Motoric components of this behavior resemble the involuntary movements elicited in parkinsonian patients by large doses of L-dopa, as well as the motor tics of Gilles de la Tourette's disease (40).

In cats and monkeys, the stereotyped behavior produced by amphetamine takes on a "searching" quality. Chimpanzees intoxicated with amphetamine display patterns of looking from side to side, as well as self-picking and grooming behavior, that are reminiscent of the stereotyped purposeless searching and grooming behavior of human amphetamine addicts (43). Ellinwood, who has studied human amphetamine psychosis as well as the effects of chronic amphetamine administration in rats, cats, and monkeys, has emphasized the formal similarities of the human and animal stereotyped behaviors (44).

We found d-amphetamine only twice as potent as the l-isomer in eliciting stereotyped behavior in rats, which is much less than the ten-fold difference in the capacity of these drugs to stimulate locomotor activity (38–40), thus implicating dopamine as the catecholamine of major importance in mediating this behavior. The fact that the two isomers were not quite equal in activity suggests that norepinephrine may play some role, conceivably a triggering one, in the stereotyped behavior.

Other evidence also implicates dopamine in the stereotyped behavior. While drugs that block the conversion of dopamine to norepinephrine diminish amphetamine-induced locomotor stimulation, they fail to alter the stereotyped compulsive behavior (42, 45). Although large lesions in the corpus striatum abolish the stereotyped behavioral effects of amphetamine (46), experiments with more discrete lesions implicate the olfactory tubercle (47) and the nucleus accumbens (48) as the specific dopamine tracts responsible for certain components of the stereotyped behavioral syndrome.

If the stereotyped behavior of amphetamine psychotics is analogous to the similar behavior elicited by amphetamine in animals, then the evidence for dopaminergic mediation of these effects in animals might apply also to man. However, it is not clear whether stereotyped compulsive behavior is a primary feature of amphetamine psychosis itself. The most dramatic and schizophrenic-like aspect of amphetamine psychosis is paranoid thinking.

On the basis of animal studies comparing d- and l-amphetamine, Angrist and associates (49) deduced that comparing in humans the potencies of d- and l-amphetamine in eliciting amphetamine psychosis might indicate the relative roles of dopamine and norepinephrine. Accordingly, three volunteers were given escalating doses of d- or l-amphetamine on separate occasions. All three subjects were rendered psychotic by the drug. Strikingly, d-amphetamine and l-amphetamine had similar potencies in eliciting the psychosis. In the three patients, the ratios of the total doses of l-amphetamine to d-amphetamine required to produce the psychosis were 1.25, 1.53, and 1.0.

How do these data compare with the relative potencies of these isomers in eliciting central stimulation in man? D-amphetamine is about four times as potent as l-amphetamine as a central stimulant in man (50). Angrist and associates (49) observed that, during the early stages of amphetamine administration, considerably greater stimulant effects were observed with d-amphetamine than with l-amphetamine. These symptoms included jitteriness, talkativeness, increased motor activity, and a generally enhanced alertness. With comparable doses, l-amphetamine produced few if any of these effects. Thus, in human subjects, d- and l-amphetamine were much more similar in their capacity to elicit psychosis than in their ability to effect central stimulation.

Assuming that the comparative neurochemistry of

dopamine and norepinephrine neurons is similar in man to that in animals, one might conclude from this experiment that the induction of amphetamine psychosis is mediated by one or another dopamine tract in the brain.

CONCLUSIONS

Returning to the possible role of amphetamine psychosis as a model of schizophrenia, one difficulty already mentioned is that the amphetamine illness selectively resembles paranoid schizophrenia. Besides its psychotogenic effects, amphetamine produces a wide spectrum of other effects. Perhaps if amphetamine acted solely on selected dopamine tracts, the psychosis it precipitates would be a more faithful model of an undifferentiated form of schizophrenia or one whose characteristics were determined primarily by the patient's previous personality. Conceivably other amphetamine effects transform the model schizophrenia into a predominantly paranoid psychosis.

One possible candidate for a contaminating action would be the norepinephrine-mediated alerting effect of amphetamine. One might speculate that this alerting action forces the patient to strive for an intellectual framework in which to focus all the strange feelings that are coming over him as the psychosis develops. This quest for meaning and its subsequent "discovery" in a system of delusions might be the essence of the paranoid process in these patients. According to this reasoning, a schizophrenia-like component of amphetamine psychosis might be mediated primarily by brain dopamine while the "paranoid solution" is facilitated by the drug's alerting effects through the stimulation of the norepinephrine systems.

If indeed the norepinephrine-mediated alerting actions of amphetamine interact with and contaminate a purer, dopamine-mediated amphetamine psychosis, then removal of these "norepinephrine effects" might leave one with an amphetamine psychosis more closely resembling schizophrenia than the present version. Drugs that would stimulate dopamine mechanisms but not norepinephrine mechanisms in the brain might elicit such a "pure" model of schizophrenia.

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Psychomotor Activity and Cerebrospinal Fluid Amine Metabolites in Affective Illness

BY ROBERT M. POST, M.D., JOEL KOTIN, M.D., FREDERICK K. GOODWIN, M.D., AND EDNA K. GORDON

In order to evaluate the effect of psychomotor activity on CSF amine metabolites, lumbar punctures were performed after moderately depressed patients had simulated manic hyperactivity for four hours. The CSF levels of 5-hydroxyindoleacetic acid (5-HIAA) and homovanillic acid (HVA) were significantly higher after simulated mania or exercise alone than in the same patients after bed rest. In addition, there was a trend for levels of 3-methoxy-4-hydroxyphenylglycol to increase with activity. The levels of 5-HIAA and HVA correlated with the amount of motor activity: lowest in depression, intermediate in mania and hypomania, and highest in simulated mania. Both metabolites were higher in severe mania than in hypomania. These results suggest that psychomotor activity is an important determinant of CSF amine metabolite levels in affective illness.

THIS STUDY was designed to evaluate systematically the effect of psychomotor activity on amine metabolites in the cerebrospinal fluid of patients with affective illness.

It has been suggested, largely on the basis of indirect pharmacological evidence, that alterations in brain neurotransmitter amines (norepinephrine, dopamine, and serotonin) may be involved in the pathophysiology of affective disorders (1–3). A number of investigators have attempted a more direct evaluation of these hypotheses by measuring levels of amine metabolites in the cerebrospinal fluid (CSF) of patients with affective illness. Particular attention has been given to 5-hydroxyindoleacetic acid (5-HIAA), homovanillic acid (HVA), and 3-methoxy-4-hydroxyphenylglycol (MHPG), the major central metabolites of serotonin, dopamine, and norepinephrine, respectively.

Several investigators have reported lower levels of

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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The authors wish to express their appreciation to the nursing staff of 4-West for their generous contributions to this study.

TABLE I
Results of Studies of CSF Amine Metabolites in Affective Illness

Study	Control* N	Control* Mean±S.D.	Depression N	Depression Mean±S.D.	Mania N	Mania Mean±S.D.
			CSF 5-HIAA(ng./ml.)			
Ashcroft (4)	21	19.1±4.4	24	11.1±3.9	4	18.7±5.4
Dencker (6)	34	30(median)	14	10(median)	6	10(median)
Fotherby (15)	11	11.5±4.1	11	12.2±8.2		
			6	16.6±9.4**		
Coppen (7)	20	42.3±14	31	19.8±8.5	18	19.7±6.8
Roos (11)	26	29±7	17	31±8	19	36±9
Bowers (9)	18	43.5±16.8	8	34.0±11.5	8	42.0±10.3
Van Praag (8)	11	40±24	14	17±17		
Papeschi (10)***	10	28±3	12	22±2		
Gottfries (16)	60	32.4±10.4				
McLeod (5)	12	32.6±11.4	25	20.5±12.1		
Mendels (14)			12	12.9±6.0	4	17.1±14.6
Goodwin (13)†	29	27.3±1.6	55	25.5±1.3	16	28.7±2.5
			CSF HVA(ng./ml.)			
Roos (11)	7	44±31	6	29±7	7	41±23
Roos (17)***	39	34±3	37	34±4	42	59±6
Bowers (9)			8	22.7±14.1	7	22.2±16.3
Papeschi (10)***	18	50±6	17	19±4		
Gottfries (16)	60	44.4±23.9				
Van Praag (18)	12	42±16	20	39±16		
			8	32±8††		
Mendels (14)			12	27.1±22	2	44.2±8.5
Goodwin (19)†	28	22.4±2.4	49	15.2±2.1	16	25.7±4.3

*The various control groups consisted of neurologic, psychiatric, and alcoholic patients (4); neurologic patients (5,6,9); non-affectively ill patients (7,18); normal volunteers (11,16); nondepressed patients without neurological abnormalities (8); neurological patients without extrapyramidal, epileptic, or senile illness (10,13); normal parents of neurologic patients (13); and schizophrenics (15).
**CSF was taken after one hour of exercise.
***Data are presented as mean±S.E.M.
†The control group cited was studied in collaboration with T.N. Chase; data are presented as mean±S.E.M.
††Subgroup of patients with retarded depression.

CSF 5-HIAA in depressed patients than in neurological controls (4, 5), normal volunteers (6), and non-affectively disturbed controls (7, 8). Others, however, have failed to find significantly lower levels in depression (9–11). The 5-HIAA values in manic patients have been found to be low (6, 7), normal (4, 9), or high (11) in comparison with those of controls. Two groups (4, 6) have found a trend toward higher values of 5-HIAA in mania than in depression.

We have recently reported data on the CSF 5-HIAA levels of a group of 55 depressed patients, 16 hypomanic and manic patients, and 29 controls,[1] all studied under the same conditions at NIMH. The control group was made up of 19 patients with neurological syndromes thought not to involve the central nervous system and ten normal parents of children admitted for neurological evaluation. There were no significant differences in the CSF 5-HIAA between depressed, manic, and control groups (13). These various results from the literature are summarized in table 1.

[1] The control group was studied by T.N. Chase and E.K. Gordon. Some of the data from this group have been published previously (12).

With regard to CSF HVA levels, similar discrepancies exist in the literature. The level of the dopamine metabolite in depressed patients has been reported to be lower than in neurological patients by some authors (10, 11), but not to be different from that in nondepressed psychiatric patients (9) or in an unspecified control group (18) by others. In the few manic patients studied, the HVA values did not vary significantly from those of depressed patients or controls in one study (9), while another group found HVA to be higher in manic than in depressed patients (11, 17).

In our studies, depressed patients had lower HVA levels than did manic patients ($p < .05$) or controls ($p < .10$) (19). The HVA results in the literature are also summarized in table 1.

Studies from this laboratory (20, 21) have indicated that CSF MHPG levels were lower in depressed patients than in manic patients or controls. However, another laboratory has been unable to find any difference between depressed patients and controls, but did report significantly higher levels in manic patients (22).

The present study was designed to evaluate one of the factors that might contribute to the inconsistency and

TABLE 2
Comparison of CSF Amine Metabolites (ng./ml.) in Baseline Depression and Simulated Mania or Physical Hyperactivity

Patient*	Sex	Age	Diagnosis	5-HIAA		HVA		MHPG	
				Baseline	Activity	Baseline	Activity	Baseline	Activity
1	F	32	Bipolar	21	37	17	43	—	—
2	F	25	Unipolar	44	61	—	**	—	***
3	M	21	Addict on methadone	19	26	22	32	—	
4	F	36	Unipolar	29	30	6	45	2	12
5	M	38	Bipolar	44	38	27	29	2	27
6	F	54	Unipolar	17	34	17	24	16	3
7	F	75	Bipolar	38	53	26	52	6	9
8	F	19	Unipolar	17	39	7	75	9	17
9	M	46	Bipolar on lithium	34	62	13	37	10	17
Mean (±S.E.M.)		38.4		29.2±3.7	42.2±4.4†	16.9±2.8	42.1±5.7†	7.5±2.2	14.2±3.4†

*Patients 1–7 simulated mania, while 8 and 9 were only physically hyperactive.
**A spuriously high value (444 ng./ml.), attributable to covert salicylate ingestion, was discarded.
***Two assays in which the CSF had been stored more than three months were discarded.
†Significantly different from baseline (paired t test, two-tailed): 5-HIAA and HVA = $p<.01$; MHPG = $p<.10$.

variability in these reports of CSF amine metabolites—namely, the level of physical or psychomotor activity prior to the sampling of the CSF. The possibility that the degree of activity might affect amine metabolite levels in the CSF was suggested to us by the general trend for amine metabolites to be reported as lower in depression and slightly higher in mania.

To investigate this hypothesis, moderately depressed patients were asked to simulate a state of manic hyperactivity and euphoria and the CSF amine metabolite levels were studied before and after the simulation in each patient. Two additional patients were asked to be only physically active. To our knowledge, the only previous data related to this question were obtained by Fotherby and associates (15), who found slight but nonsignificant increases in CSF 5-HIAA after one hour of exercise in six patients. Van Praag (8) and Papeschi and McClure (10) reported that motor activity in their depressed patients did not correlate with CSF amine metabolite levels, whereas Bowers and associates (9) noted the possibility that physical activity may affect 5-HIAA levels.

METHOD

Baseline Studies

Physically healthy patients, screened diagnostically for primary affective illness by two physicians and a social worker, were studied on two 12-bed metabolic research units at the National Institute of Mental Health. The behavior of all patients was rated twice daily by a trained nursing research team, using a multi-item 15-point scale designed for the evaluation of depression and mania (23). Patients were drug-free for two weeks prior to each lumbar puncture (LP) and special care was taken to avoid sedatives, phenothiazines, and salicylates.[2]

[2] Two patients were maintained on constant doses of a drug (one on lithium and one on methadone) during the baseline and hyperactivity LPs.

Only patients who volunteered after a careful explanation of the procedure and its purpose were included. Baseline LPs were performed at 9 a.m., with patients in the lateral decubitus position. The patients fasted and remained at bed rest from midnight until the LP. The first 8 ml. of CSF were collected in 20 mg. of ascorbic acid and immediately frozen at -20C. The 5-HIAA was measured by the method of Ashcroft and Sharman (24), HVA by the method of Gerbode and Bowers (25), and MHPG by the method of Gordon and Oliver (20), involving electron-capture gas-liquid chromatography. In addition, 1 ml. of CSF from these patients was frozen for the determination of levels of cyclic-adenosinemonophosphate (cyclic-AMP) (26).

Simulation of Mania

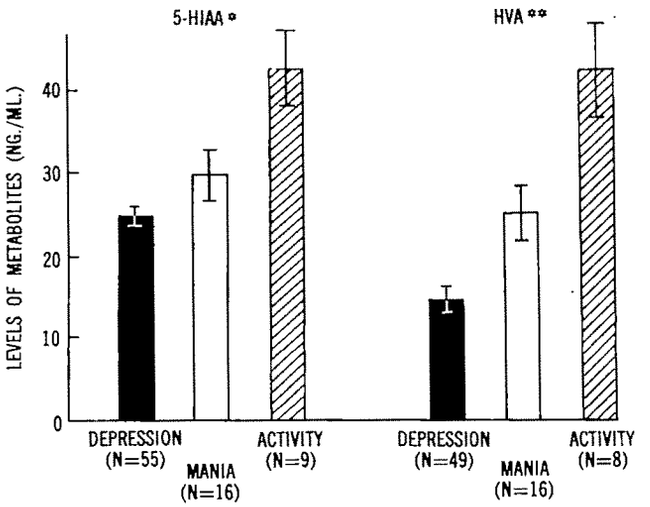
After the baseline LPs were performed, seven patients, who were moderately depressed but willing to attempt to simulate mania, were awakened at 5 a.m. and, in the company of at least one staff member, remained active for four hours until the repeat LP was performed at 9 a.m. All subjects had observed true manic patients on the ward, so they had little difficulty in finding a model for their behavior. With staff participation and encouragement, these patients were hyperactive and, in most cases, hyperverbal. They ran up and down the corridors; played ping-pong, tennis, and pool; danced, sang, and told jokes; did light calisthenics; drew murals on the walls; and often disrupted the ward in the true spirit of the experimental manipulation.

The 9 a.m. LP after the simulation of mania followed the baseline LP by one day for three patients and by two, 17, 24, and 48 days for each of the other four patients. These patients remained in a similar clinical condition and received similar depression ratings during the interval between the LPs.

Physical Activity

In order to attempt to separate the effects of physical activity from those of increased verbal activity and

FIGURE 1
CSF Amine Metabolites in Natural and Experimentally Induced Behavioral States



*The levels of 5-HIAA did not differ significantly between mania and depression, but the levels after activity were higher than those in either depression ($p<.001$) or mania ($p<.02$).
**The levels of HVA were lower in depression than in mania ($p<.05$); the levels after activity were also significantly higher than those in either depression ($p<.001$) or mania ($p<.05$).

heightened mood, two patients were asked to be only physically hyperactive; no attempt was made to imitate mania or a manic mood. The procedure for patient 8 was otherwise identical to that described above, while patient 9 was active from 8 a.m. to 12 noon and received an LP at 3 p.m. This LP was compared with an LP taken at 3 p.m. two days previously, before which the patient was not at bed rest and was allowed his usual moderate activity on the ward.

RESULTS

Success of the Simulated Mania

All of the subjects were able to cooperate with the procedure and were clearly hyperactive from 5 a.m. until the LP was performed at 9 a.m. Most patients experienced some mood elevation during the procedure and regarded the experience as a positive one. Patient 4, who had marked diurnal variation in her depression, reported that she felt better during and after the simulation of mania, in contrast to the usual intensification of her depression in the morning. In the case of patient 1, who had a past history of brief manic episodes, it was virtually impossible to determine whether she was simulating mania or, in fact, had become manic. In other patients it was more readily apparent that they were acting and they reported mixed feelings about their roles.

Amine Metabolites in Simulated Mania and Physical Hyperactivity

The levels of CSF amine metabolites following the simulation of mania were higher than those obtained from the same patients while at bed rest (see table 2). In the two patients who were only physically hyperactive, the increased levels of amine metabolites were of the same order of magnitude as those of patients who simulated mania. If the baseline and hyperactivity LPs are compared for all patients, the increase in both 5-HIAA and HVA is significant at the $p < .01$ level. The 5-HIAA showed a 45 percent increase, from 29.2 to 42.2 ng./ml. HVA showed a 150 percent increase, from 16.9 to 42.1 ng./ml. The MHPG levels increased from 7.5 to 14.2 ng./ml. This 90 percent increase in MHPG only approaches statistical significance ($p < .10$) because of the marked reversal in one patient.

Psychomotor Activity and Group Differences

Analysis of our entire population of patients with affective illness suggests that the levels of both 5-HIAA and HVA in the CSF parallel the patients' general level of behavioral activity before the LP is performed (figure 1). Depressed patients had low levels of psychomotor activity and had the lowest CSF amine metabolite levels; hypomanic and manic patients were more active and had intermediate amine metabolite levels; patients simulating mania, who were the most intensely active over a brief period of time, had the highest CSF amine metabolite levels.

The direction of the amine metabolite differences within diagnostic groups lends support to the suggestion that the level of psychomotor activity is an important factor in determining the level of amine metabolites. Hypomanic patients (those with mania ratings of less than 4) had normal amine metabolite values, while acutely disturbed and psychotic patients (those with mania ratings of 4 or more), for whom total bed rest could often not be maintained, had higher 5-HIAA and HVA values, similar to those obtained after our study patients simulated mania (table 3). These differences were significant for both 5-HIAA and HVA ($p < .05$, one-tailed t test).

Table 3 summarizes these relationships of CSF amine

TABLE 3
Levels of CSF Amine Metabolites in Different Levels of Psychomotor Activity

Level of Activity	5-HIAA N	5-HIAA ng./ml.±S.E.M.	HVA N	HVA ng./ml.±S.E.M.
High activity				
Activity alone	2	50.5±11.5	2	56.0±19.0
Simulated mania	7	39.9±4.8	6	37.5±4.4
Severe mania (rating over 4)	6	35.5±5.2	6	37.0±8.8
Low activity (bed rest)				
Controls*	29	27.3±1.6	28	22.4±2.4
Hypomania (rating under 4)	10	24.6±1.8	10	18.9±3.2
Depression	55	25.5±1.3	49	15.2±2.1

*This group includes 19 neurological patients and ten normal parents of neurologic patients studied by T. N. Chase and E. K. Gordon.

TABLE 4

Lack of Increase in Amine Metabolites (ng./ml.) in Patients Under Stressful Experimental Conditions

Patient	Condition	5-HIAA		HVA		MHPG	
		Baseline	Experimental	Baseline	Experimental	Baseline	Experimental
5	Unsuccessful attempt to simulate mania while at bed rest	44	27	27	28	2	7
10	Sleep deprivation for 26 hours, with bed rest from midnight to a 9 a.m. LP	29	19	12	10	12	11

metabolite levels to activity. Physically hyperactive patients, those simulating mania, and severely manic patients all had high values in contrast to those from control, hypomanic, and depressed groups.

Within the larger group of depressed patients, agitated patients did not have significantly higher levels of amine metabolites than did predominantly retarded patients. There was no significant relationship between CSF amine metabolite levels and severity of depression.

DISCUSSION

These results indicate that experimentally induced increases in psychomotor activity significantly elevate the levels of 5-HIAA and HVA in the CSF. Activity also tends to elevate the CSF levels of MHPG. In addition, CSF 5-HIAA and HVA levels correlate with the degree of spontaneous psychomotor activity associated with different clinical states.

Increased mixing of ventricular-cisternal cerebrospinal fluid into the lumbar area as a secondary result of activity does not appear to account for all the observed changes. Moir and associates (27) reported that, in man, the ratio of ventricular to cisternal to lumbar concentration for 5-HIAA is 5.5 to 4.5 to 1 and for HVA it is 8.8 to 4.5 to 1. Data from NIMH suggest a ventricular to lumbar concentration ratio of 3 to 1 for 5-HIAA and 10 to 1 for HVA (20). Thus, if there were a greater mixing of CSF from ventricular and/or cisternal fluid into the lumbar region during hyperactivity, a modest increase in 5-HIAA and a more substantial increase in HVA would be expected; this is essentially what was observed in these patients.

On the other hand, MHPG, which does not have a demonstrable ventricular-lumbar gradient (20), also increased after activity. Cyclic-AMP, which does have a rostral-caudal CSF gradient (28) was not significantly altered by the simulation of mania in these patients (26). The levels of cyclic-AMP, in fact, showed a slight decrease rather than the increase that would be expected if CSF mixing were occurring. In addition, in our study the mean levels of CSF proteins were not different in the baseline LP (33.0 mg./100 cc.) than in the LP after simulating mania (32.2 mg./100 cc.). There is a reverse gradient for CSF protein, with an average of 17.1 mg./100 cc. in ventricular fluid, 18.3 mg./100 cc. in cisternal fluid, and 31.3 mg./100 cc. in lumbar fluid (29). Although this gradient is of relatively small magnitude and the potential for mixing is unknown, lumbar CSF proteins were not changed by the increased activity, as they could have been if the simulated mania substantially increased CSF mixing. Finally, activity studies in animals (30, 31) that showed changes directly in brain, where there is no consideration of CSF gradients, suggest that the increases in metabolites observed in the present study may be reflective of central amine changes and not merely the result of CSF mixing.

Although the condition of physical activity alone was sufficient to elevate the levels of amine metabolites, it is possible that mood elevation and the activation of verbal and psychological processes could also be sufficient to produce increases in amine metabolite levels. In an attempt to evaluate this possibility, patient 5, who later successfully simulated mania while active, was first asked to simulate mania while lying at bed rest. The patient was not able to achieve this mood state, suggesting that physical activity may have a facilitating influence on the initiation of mania-like mood states. It was also our clinical impression, however, that the degree of mood elevation during the simulation of mania was not clearly related to the degree of increase in amine metabolites.

Considerable evidence supports the conclusion that the increases in amine metabolites were not due to the two hours of sleep deprivation that the patients incidentally experienced during the experimental procedures. Patient 5, who unsuccessfully attempted to simulate mania while at bed rest, yet was also awake from 5 a.m., did not show major increases in amine metabolites (table 4). Patient 10, who was totally sleep-deprived for 26 hours as part of another study (but was maintained at bed rest from midnight until 9 a.m.), also showed no metabolite increases. Furthermore, patient 9, who was active from 8 a.m. to noon (so that no sleep deprivation was involved) showed elevated levels of metabolites similar to those of the other patients. Finally, Bowers and associates (9) have shown that the average amount of sleep during the six nights bracketing their LP testing was positively related to the CSF HVA levels, so that sleep deprivation associated with the simulation of mania might be expected to decrease rather than increase the HVA levels. Results from our laboratory indicate that there is

no correlation between the number of hours of sleep on the night before the LP and the CSF amine metabolite levels (19).

There is ample evidence from animal studies in the literature that brain turnover of norepinephrine, dopamine, and serotonin can be increased as a result of a variety of stresses (31). In a study pertinent to our experimental manipulation, Bliss and Ailion (30) have shown that both stress and physical activity, either alone or in combination, increase the levels of HVA in rat brain. The simulation of mania and activity in our study may have produced psychic as well as physical stress, although this was not apparent from the subjective reports of most patients. In favor of activity rather than stress in accounting for our data is the lack of change in amine metabolites in the patient who unsuccessfully attempted to simulate a manic mood while at bed rest, even though he reported the experience as stressful. Also, the patient who underwent the stress of 26-hour sleep deprivation showed no increases in CSF amine metabolites (table 4).

Since dopamine is the amine most closely associated with alterations in motor activity in animals (32), it is of interest that HVA showed the largest increases after simulated mania and activity. This is consistent with our finding that the CSF HVA levels differed in depression and mania, while the 5-HIAA levels did not. L-dopa, the precursor of dopamine, has induced behavioral activation and switches into hypomania in depressed patients (33, 34). It is likely that dopaminergic neurons are functionally related to psychomotor activity in man as well as in various animal species.

Taken together, the data presented in this study strongly suggest that psychomotor activity, especially physical activity, plays an important role in determining the levels of CSF amine metabolites in affective illness. The need for appropriate methodological controls for activity is underlined by these data. We suggest that the evaluation of biologic changes in simulated behavioral states might help to differentiate those changes primarily related to underlying psychiatric illness from those secondary to one or more of its behavioral manifestations. This theme will be elaborated in a subsequent paper (35).

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Cerebrospinal Fluid Amine Metabolites in Affective Illness: The Probenecid Technique

BY FREDERICK K. GOODWIN, M.D., ROBERT M. POST, M.D., DAVID L. DUNNER, M.D., AND EDNA K. GORDON

Probenecid inhibits the removal of 5-HIAA and HVA (the major metabolites of serotonin and dopamine) from the cerebrospinal fluid. The accumulation of these metabolites following high doses of probenecid was studied in patients with affective illness in order to assess central amine function. The metabolite accumulation was increased by administering the appropriate precursors (which increase amine synthesis) and was decreased by administering specific synthesis inhibitors. Compared with controls, the depressed patients had low HVA accumulation, while addicts on methadone had low 5-HIAA accumulation. Within the group of depressed patients, HVA accumulation was higher in bipolar than in unipolar patients.

A LARGE BODY of evidence from animal studies indicates that the biogenic amines norepinephrine, dopamine, and serotonin act as central nervous system (CNS) neurotransmitters, particularly in those areas of the brain subserving "emotional" functions (1). Speculations that functional abnormalities in one or more of these neurotransmitter amines may be involved in human psychiatric states (particularly affective illness) have been based largely on indirect evidence from pharmacological studies in animals. For example, drugs that increase the functional levels of biogenic amines in the brain of experimental animals can alleviate some depressions, while drugs that deplete the levels of these amines have been reported to induce depression in some cases (2, 3). In addition it has been hypothesized on the basis of recent animal data that the phenomenon of addiction to narcotic drugs may involve central amine mechanisms (4). For example, Way and his colleagues (5) have presented evidence in studies of mice that the development of tolerance to chronic morphine administration is dependent on an increase in brain serotonin turnover.

However, direct data from patients concerning the relationship of CNS amine metabolism to psychiatric illness has been fragmentary and has mainly involved studies of amine metabolite levels in the cerebrospinal fluid (CSF) of depressed patients. In some studies (6–9), the CSF levels of 5-hydroxyindoleacetic acid (5-HIAA), the major metabolite of serotonin, have been reported to be lower in depressed patients than in various "control" groups; other investigators have found no significant differences (10–12). Levels of homovanillic acid (HVA), the major metabolite of dopamine, have been reported to be lower in depressed patients than in neurological controls by some investigators (10, 12), but not to be different from those of "controls" by others (11, 13). Similar confusion exists in relation to the levels of these metabolites in manic patients (6, 8, 10, 11). Levels of 3-methoxy-4-hydroxyphenylglycol (MHPG), the major metabolite of norepinephrine in the CNS, have been noted by our group to be lower in depressed patients than in normal subjects or manic patients (14), but others do not agree (15). We have discussed elsewhere (16) the variety of factors that probably contribute to the variability in the CSF levels of these metabolites as reported by various investigators. It has been proposed that more meaningful conclusions might be drawn about the functional state of a dynamic pool of biogenic amines if data concerning both the level and the rate of change were available.

In an attempt to develop a technique that might reflect the "turnover" of CNS amines, probenecid has been administered to patients by a number of investigators (10, 17–19). The rationale for the use of probenecid in the study of dopamine and serotonin turnover in the CNS is based on several findings: 1) probenecid can inhibit the renal transport of several organic acids, including 5-HIAA and HVA (20, 21); 2) these acids are removed from the CNS into the blood by an active transport mechanism similar to that found in the kidney (22); 3) inhibition of this transport by the administration of pro-

Based in part on a paper read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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The authors wish to thank Drs. William E. Bunney, Jr., and Dennis L. Murphy for their valuable support and Mr. Martin Matzen and Ms. Eloise Orr for their technical assistance in this study.

benecid causes linear elevations (over at least several hours) of 5-HIAA and HVA in the brain (23), ventricular fluid (24), and cisternal CSF (25) of a variety of animal species; and 4) the application of steady-state mathematical techniques indicates that the rate of elevation of acid amine metabolites after the administration of probenecid produces turnover values for the parent amines that are comparable to those obtained by other methods, such as amine accumulation following the inhibition of monoamine oxidase or amine depletion following the inhibition of synthesis (26).

In other words, the rate at which the amine metabolites accumulate after their exit is blocked directly reflects the rate at which the parent amine is being synthesized, utilized, and metabolized (turnover). The rapid and linear increase in 5-HIAA or HVA following large doses of probenecid in animals suggests that the blockade of transport has a rapid onset and remains essentially complete throughout the experiment. We have recently demonstrated that MHPG, the major metabolite of norepinephrine, does not accumulate to an appreciable degree in the CSF of patients receiving probenecid, and thus this technique is not useful in assessing CNS norepinephrine turnover (27).

In the initial attempts to use probenecid in the study of brain amines in humans, small doses of the drug were given over two to three days, producing only slight increases in 5-HIAA and HVA. In the animal studies, in which larger doses were given, the rate of increase of 5-HIAA in CSF was orders of magnitude greater than that reported in human subjects; this suggests that in these initial human studies the relatively low probenecid levels caused only a minimal, intermittent inhibition of acid metabolite transport out of the CNS.

We have previously reported a refinement of this technique in which larger and more frequent doses of probenecid were given to man, producing rapid and pronounced elevations of the acid metabolites of serotonin and dopamine (19). More recently Van Praag and his coworkers (28) have modified their original technique, employing doses approaching the range reported here.

The present study first examined the alterations in the probenecid-induced accumulation of 5-HIAA and HVA produced by amine precursors and synthesis inhibitors in order to provide evidence for the validity of this technique in the estimation of CNS amine turnover. The amine precursors L-dopa and L-tryptophan and the synthesis inhibitors alpha-methyl-para-tyrosine (AMPT) and parachlorophenylalanine (PCPA) were administered during clinical trials conducted for the purpose of evaluating their therapeutic effectiveness in depression and mania (29, 30). Then differences in the probenecid-induced accumulation of 5-HIAA and HVA were examined in different diagnostic groups—patients with affective illness, a small group of addicts on methadone, and normal controls. Within the group with affective illness, the diagnostic subgroups, severity of various symptoms, and response to treatment were examined in relation to the probenecid-induced alterations in CSF amine metabolites.

METHOD

Thirty-four patients with affective illness, eight heroin addicts on methadone, and eight normal controls[1] were studied on a metabolic research unit at the NIMH specifically designed for the collection of behavioral and biochemical data on a longitudinal basis. Subjects were limited to those who volunteered after a careful explanation of the procedures involved. The depressed patients had symptoms that ranged from moderately severe to severe, including psychomotor retardation or agitation, anorexia, weight loss, sleep disturbance, and depressive thought content, often of psychotic proportions; they were all free of extenuating medical problems. The diagnostic criteria and behavioral rating system used have been previously described (31).

All subjects except those on methadone were drug-free for at least two weeks before the study began. During the study, all foods in the diet that might affect indoleamine or catecholamine metabolism were restricted. The initial lumbar puncture (LP) was performed at 9 a.m., with the patients in the lateral decubitus position. The second LP was done at 3 p.m. on the following day; during the 18 hours preceding the second LP, 100 mg./kg. of probenecid was administered in divided doses (9 p.m., 2 a.m., 7 a.m., and 12 noon). Patients were kept at bedrest for eight hours prior to the initial LP and throughout the time of probenecid administration.

For the studies focused on drug effects, the entire probenecid procedure was repeated in an identical fashion, so that placebo and drug data could be compared for each patient. The administration of other drugs, including aspirin and sedatives, was carefully avoided throughout the study period. In order to have some data for direct comparison with the previously studied control group, a small number of depressed and methadone patients were given an LP after only nine hours of receiving probenecid. In this group the dose averaged 115 mg./kg.

All LPs were nontraumatic; the samples were collected in 20 mg. of ascorbic acid per 10 ml. of fluid and stored at −20 C until analyzed. Levels of 5-HIAA and HVA were determined using the first 8 ml. of CSF obtained, according to modifications of the methods of Ashcroft and Sharman (32), Gerbode and Bowers (33), and Anden and associates (34). Except as otherwise indicated, statistical comparisons were done by Student's t test for grouped or paired data.

RESULTS

Effects of Amine Precursors and Synthesis Inhibitors

If the probenecid-induced accumulation of 5-HIAA and HVA in the CSF does in fact reflect the turnover (and therefore also the synthesis) of serotonin and dopamine in the CNS, then this accumulation should be increased by compounds that increase the synthesis of the

[1] Studied in collaboration with T.N. Chase.

two amines and decreased by inhibitors of amine synthesis.

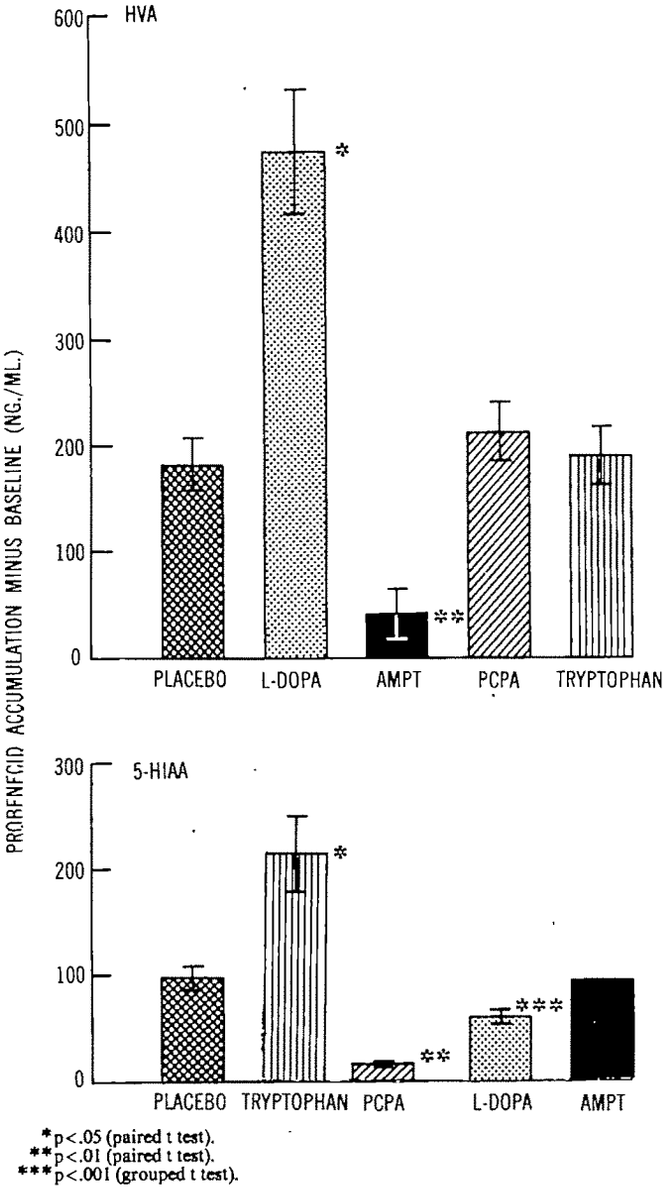
To test this hypothesis, four drugs that specifically increase or decrease the synthesis of dopamine or serotonin in the CNS were studied for their effects on the probenecid-induced accumulation of HVA and 5-HIAA. The results are summarized in figure 1. In this figure the bars represent the amount of metabolite accumulated, i.e., the level attained while the patient was on probenecid minus the baseline level before the administration of probenecid. In each instance the comparison is made between the probenecid-induced accumulation during the pre-drug period and the accumulation while that same patient was receiving an amine precursor or synthesis inhibitor.

L-dopa, the amino acid precursor of dopamine, was administered to five patients in combination with alpha-methyl-dopa-hydrazine (MK485), a selective inhibitor of peripheral dopa decarboxylase that potentiates the uptake of administered dopa into the brain (29). L-dopa administered in this way is known to substantially increase brain dopamine synthesis. As is evident from the figure, L-dopa produced a large increase in the HVA accumulation and a moderate but significant decrease in 5-HIAA accumulation. On the other hand, pretreatment of three patients with AMPT, a specific inhibitor of dopamine synthesis, both peripherally and centrally (30), almost completely abolished the probenecid-induced accumulation of HVA; 5-HIAA accumulation was unaffected by AMPT.

L-tryptophan, the amino acid precursor of serotonin, was administered to five patients and caused a large increase in 5-HIAA accumulation but did not significantly affect HVA accumulation. On the other hand PCPA, a specific inhibitor of serotonin synthesis (35) administered to two patients, virtually eliminated the probenecid-induced accumulation of 5-HIAA; HVA accumulation was not affected by PCPA.

Thus for both serotonin and dopamine the appropriate amine precursor increased the amine metabolite accumulation, while the specific inhibitors of synthesis decreased the metabolite accumulation during administration of probenecid.

FIGURE 1
Probenecid-Induced Increase in Amine Metabolites: The Effects of Amine Precursors and Synthesis Inhibitors



*p<.05 (paired t test).
**p<.01 (paired t test).
***p<.001 (grouped t test).

Baseline Levels of 5-HIAA and HVA in Different Groups

As illustrated in table 1, the baseline levels of 5-HIAA revealed no significant differences between the various diagnostic groups. In regard to HVA, the depressed patients tended to have lower CSF levels when compared with hypomanic patients ($p < .05$) or normal controls ($p < .10$).

Probenecid-Induced Alterations in 5-HIAA and HVA

A number of patient variables were examined for their possible effects on the data obtained. The correlations are summarized in table 2. Although a wide age range existed in our patient population (the mean ages for each group were: controls=29, patients with affective illness =43, addicts=26), there was no correlation between age or sex and the probenecid-induced accumulation of 5-HIAA or HVA. In our initial studies, using a fixed dose of probenecid, a significant negative correlation was found between the patient's weight and the accumulation of amine metabolites while on probenecid (19). As table 2 shows, when the drug is administered on a milligram per kilogram basis there is no significant relationship between amine metabolite accumulation and either patient weight or the absolute dosage level of probenecid. Because the drug was not available in units smaller than 250 mg., the level of 100 mg./kg. represented an approximation. The actual dose range was 85–118 mg./kg., accounting for the small but nonsignificant positive correlation between dose per kilogram and metabolite accumulation. The marginal nature of this correlation is consistent with earlier work showing that

TABLE 1

The Effects of Probenecid on CSF Amine Metabolites in Different Diagnostic Groups

Group	N	Baseline Mean±S.E.M.	After Probenecid Administration: N	Nine Hours Mean±S.E.M.	N	18 Hours Mean±S.E.M.
		CSF 5-HIAA (ng./ml.)				
Control group*	29	27.3±2.2	8	112±9.0		—
Depressed patients	58	25.6±1.3	6	90±9.5	26	132±7
Hypomanic patients	17	29.2±2.4		—	8	133±12
Addicts on methadone	5	24.8±2.6	4	66±17**	5	107±9***
		CSF HVA (ng./ml.)				
Control group	28	22.4±2	8	194±24		—
Depressed patients	53	17.7±3	6	90±11†	26	204±17
Hypomanic patients	16	24.7±5		—	8	226±35
Addicts on methadone	5	19.4±7	4	108±23**	5	250±38

*The control group, studied by T.N. Chase and E. Gordon, was comprised of ten normal individuals (parents of patients admitted for neurological evaluation) and 19 patients with neurological syndromes not primarily related to the CNS.
**Significantly different from the control group ($p<.05$).
***Significantly different from patients with affective illness ($p<.025$).
†Significantly different from the control group ($p<.01$).

at levels above 90 mg./kg. the relationship between probenecid dose per kilogram and metabolite accumulation falls off sharply (19).

Table 1 summarizes the data on the probenecid-induced accumulation of 5-HIAA and HVA in controls, patients with affective illness, and addicts on methadone. For comparisons with the control group, only the data from the smaller number of depressed or addict patients studied at nine hours can be used. The administration of probenecid resulted in significantly lower 5-HIAA accumulation in the addicts on methadone, compared with either the controls ($p < .05$) or the patients with affective illness studied at 18 hours ($p < .025$). The accumulation of 5-HIAA in the depressed patients was lower than in the controls at the nine-hour point in spite of the fact that the depressed patients received about 20 percent more probenecid than the controls on a milligram per kilogram basis. With the small number of patients studied at this time point, the difference did not reach statistical significance. The 5-HIAA accumulation at the 18-hour point was virtually identical in the depressed and manic groups; unfortunately no data were available from the control group at the 18-hour point.

The probenecid-induced accumulation of HVA in the different diagnostic groups is also summarized in table 1. Comparing those groups studied after nine hours of probenecid, the depressed patients had the lowest levels of HVA, less than half that accumulated by the controls ($p < .01$), in spite of the somewhat larger dose of probenecid in the depressed group. The addict group also had significantly lower HVA accumulation than the controls ($p < .05$). In spite of the lower baseline level of HVA in the depressed patients, there was no significant difference between the depressed and hypomanic patients in the level of HVA after administration of probenecid.

Within the group of depressed patients a number of factors relating to diagnoses, severity of depression, and drug response were analyzed for possible relationships to the probenecid-induced accumulation of 5-HIAA and/or HVA. These analyses included only the patients studied with the standard 18-hour procedure; they are summarized in tables 2, 3, and 4.

There was no significant relationship between the severity of depressive symptoms (global depression, agitation, or retardation) and the amine metabolite accumulation, but there was a trend for patients with more severe illness to have lower amine metabolite accumulation (table 2).

TABLE 2

Correlations Between Patient Variables and CSF Amine Metabolites After Probenecid Administration (Pearson's r)

Patient Variable	5-HIAA	HVA
Patient age	−.08	−.08
Patient weight	.00	−.22
Probenecid dose (gm.)	.08	−.09
Probenecid dose (mg./kg.)	.13	.16
Sleep	.17	.02
Depression ratings	−.22	−.19
Agitation	−.26	−.26
Retardation	−.31	.10

TABLE 3

CSF Levels of 5-HIAA and HVA After Probenecid Administration in Subgroups of Depressed Patients

Diagnostic Subgroups	N	5-HIAA (ng./ml.±S.E.M.)	HVA (ng./ml.±S.E.M.)
Bipolar I	8	144±7	267±32*
Bipolar II	7	128±11	180±30
Unipolar	11	127±13	173±22

*Significantly different from the unipolar group ($p<.05$, Student's t test).

The depressed patients were classified as either bipolar or unipolar on the basis of the presence or absence of a prior history of mania as documented by hospitalization; patients with a history of recurrent depression interspersed with periods of abnormal mood elevation but not mania were separately classified as "bipolar II," according to previously described criteria (36). As indicated in table 3, bipolar patients had significantly larger HVA accumulations than the unipolar patients. There were no differences in 5-HIAA accumulation.

The patients were subdivided according to their subsequent response to antidepressants, using both lithium and tricyclic antidepressants and employing criteria previously described (37). The CSF amine metabolite data for these groups are summarized in table 4. When compared with the lithium nonresponders, those depressed patients who showed a therapeutic response to lithium had significantly lower levels of both 5-HIAA ($p < .02$) and HVA ($p < .01$) after receiving probenecid. On the other hand, there was a trend for those who responded to the tricyclic antidepressants to have somewhat higher levels of 5-HIAA and HVA after receiving probenecid than the nonresponders, although this difference was not significant.

TABLE 4
CSF Levels of 5-HIAA and HVA in Depressed Patients After Probenecid Administration: Relationship to Subsequent Drug Response

Category	N	5-HIAA (ng./ml.±S.E.M.)	HVA (ng./ml.±S.E.M.)
Lithium carbonate			
Responders	10	119±10	193±15
Nonresponders	8	161±8*	285±31**
Tricyclic antidepressants			
Responders	4	139±7	229±76
Nonresponders	7	119±9	178±25

*Significantly different from lithium responders ($p<.02$, Student's t test).
**Significantly different from lithium responders ($p<.01$, Student's t test).

DISCUSSION

How adequately does the probenecid-induced accumulation of 5-HIAA or HVA in the lumbar CSF of patients reflect alterations in the metabolism or turnover of serotonin or dopamine in the brain? We have detailed elsewhere the potential difficulties in the interpretation of lumbar CSF amine metabolite data (19, 38); these problem areas include the concentration gradient for 5-HIAA and HVA from relatively high levels in brain ventricular fluid to relatively low levels in lumbar fluid, the transport time required for amine metabolites formed in brain to reach the lumbar CSF, and finally the possible contribution of local spinal cord serotonin metabolism to the CSF 5-HIAA levels.

The concentration gradient is maintained by the active removal of 5-HIAA and HVA as they move caudally from the ventricle to the lumbar sac (39). High doses of probenecid reduce the gradient by inhibiting this removal process, allowing amine metabolite levels in the lumbar CSF to more truly reflect ventricular levels. The lumbar CSF levels of 5-HIAA and HVA found after the administration of probenecid in the present study are equivalent to the levels of these metabolites in human ventricular fluid (40).

The effects of amine precursors and synthesis inhibitors on the probenecid-induced accumulation of 5-HIAA and HVA further support the validity of these data as a reflection of brain amine metabolism. Animal data indicate that there is little or no dopamine in the spinal cord, a finding consistent with the report of Curzon and associates (41), recently confirmed by our group (42), that patients with a blockage of the spinal fluid flow from above have little or no HVA in their lumbar CSF. Since AMPT, a specific inhibitor of brain dopamine synthesis, virtually eliminates the probenecid-induced accumulation of HVA in the lumbar CSF, it seems reasonable to conclude that the probenecid-induced HVA accumulation (without AMPT) reflects brain dopamine synthesis. A similar finding with AMPT has recently been reported by Sjostrom (43).

The interpretation of the 5-HIAA data is more complex because some of the 5-HIAA in the lumbar CSF appears to have its origin in the spinal cord (41, 42). Nevertheless, the levels of 5-HIAA after the administration of probenecid should represent a relatively greater contribution from the brain by virtue of the decreased removal of this metabolite along the ventricular-lumbar axis.

Previous reports of a high correlation between plasma (or CSF) probenecid levels and amine metabolite accumulation (17, 44) have raised the possibility that differences in probenecid absorption or metabolism could account for some of the differences observed in amine metabolite accumulation. This caution is relevant only when the accumulation of 5-HIAA and HVA are both altered in the same direction and to approximately the same degree, that is, when the 5-HIAA/HVA ratio is not altered (18). Sjostrom recently reported (44) that the high correlation between CSF probenecid levels and 5-HIAA accumulation ($r = 0.86$) begins to drop off at a CSF probenecid concentration above 4–5 μg./ml. Preliminary data indicate that the relatively high dosage schedule employed in the present studies has resulted in CSF probenecid levels of more than 5 μg./ml., with plasma levels in the range of the 300–400 μg./ml. In our patients, therefore, variations in probenecid absorption were less likely to make a meaningful contribution to variations in amine metabolite accumulation.

In light of the above considerations it is not surprising that the probenecid technique has "uncovered" a number of alterations in amine metabolites that were not evident from the baseline CSF metabolite levels. In patients with affective illness, 18 hours of probenecid administration (100 mg./kg.) increased the levels of 5-HIAA 400 percent and of HVA 1000 percent over baseline. At these higher levels of accumulation, contrary to the finding of Bowers (18), we did not find a significant correlation between baseline and post-probenecid levels of amine metabo-

lites. Thus, the high-dose probenecid technique does not appear to merely produce an amplification of the baseline values but probably reflects a different parameter, i.e., amine turnover.

When compared with controls and patients with affective illness, the addicts on methadone showed significantly less accumulation of 5-HIAA, a finding in agreement with the report of Bowers and associates (45). In animal studies, the initial reports of increased amine turnover produced by narcotic drugs, especially increases in serotonin turnover (5, 46) (in contrast to our clinical findings), have recently been challenged (47, 48), and the possibility of species variation has been noted.

The probenecid HVA data suggest that bipolar patients may have more rapid dopamine metabolism than unipolar patients, a finding of relevance to some pharmacological data recently reviewed by Murphy (49). Our probenecid findings add to a growing body of data indicating that unipolar and bipolar depressions may be biologically separable.

The question of whether HVA accumulation in depressed or manic patients receiving probenecid is different from that of controls cannot be finally resolved until further data are obtained. The data available (at the nine-hour point) do however suggest a lowered HVA turnover in the depressed patients, which is in agreement with previous reports (10, 13).

Our finding that the baseline levels of 5-HIAA in the CSF of depressed or manic patients was not different from that of controls is in agreement with some previous studies (6–9) but not with others (10–12). In regard to probenecid-induced accumulation of 5-HIAA, some investigators have found it reduced in depressed patients (10, 13), while others have not (18). Our own probenecid 5-HIAA data are not yet conclusive. Thus, a conclusion that serotonin turnover is decreased in affective illness is premature.

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L-Dopa, Dopamine, and Hypomania

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Greater urinary excretion of dopamine during L-dopa administration was observed in bipolar than in unipolar depressed patients. The authors suggest that increased levels of brain dopamine may play a role in the development of hypomania and mania, since there is a tendency for bipolar patients to regularly develop hypomanic episodes during L-dopa treatment and since evidence from animal studies indicates that increased brain dopamine is highly correlated with increased psychomotor activity.

BRIEF EPISODES of hypomania and mania have been observed in most bipolar depressed patients receiving L-dopa, the amino acid precursor of the catecholamines dopamine and norepinephrine (1). Similar episodes occurred significantly less frequently in unipolar depressed patients and are an uncommon side effect of L-dopa treatment in patients with Parkinson's disease (1, 2). It is not known whether this predilection for bipolar depressed patients to develop hypomanic episodes during L-dopa administration is due to a greater psychological or central nervous system (CNS) sensitivity to the stimulant effects of this drug or to altered L-dopa metabolism in these patients.

The characteristics of cortical evoked responses in bipolar patients (3) as well as their greater sensitivity to behavioral activation by other drugs besides L-dopa (4, 5) suggest that bipolar patients may exhibit altered CNS modulation of extrinsic stimuli (2). On the other hand, the differences in the behavioral response to L-dopa between bipolar and unipolar depressed patients could be secondary to differences in the metabolism of L-dopa in these two populations. In this regard, Takahashi and associates demonstrated that manic-depressive patients, whether depressed or manic, had much higher and more sustained elevations of plasma levels of another amino acid, L-tyrosine, following an oral load test (6). In animals, the excitant effects of L-dopa are closely related to dosage and appear to be directly proportional to the associated elevation in brain dopamine levels (7).

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TABLE 1
Characteristics of Depressed Patients Who Received Chronic L-dopa Treatment

Category	Depressed Patients With Hypomanic Episodes (N=4) Mean ± S.E.M.	Depressed Patients Without Hypomanic Episodes (N=4) Mean ± S.E.M.
L-dopa dosage (mg./kg.)	63 ± 13	74 ± 14
Treatment days	14 ± 5	11 ± 4
Age	48 ± 3	43 ± 10
Sex: male	1	1
female	3	3

To evaluate whether altered L-dopa metabolism might have contributed to the development of hypomania in the bipolar patients, measurements were made of the urinary excretion of dopamine, of homovanillic acid (HVA)—the major metabolite of dopamine—and of unmetabolized L-dopa in those patients who developed hypomania and in a control group of unipolar patients who did not develop hypomania.

METHOD

The assay methods (8) and the details of the clinical trial with L-dopa (9) are described elsewhere. The bipolar depressed patients were all characterized by a history of mania severe enough to require hospitalization or specific treatment. Both the bipolar patients and the unipolar patients (who did not have a history of mania) were rated as equally severely depressed on the Bunney-Hamburg Scale (10) at the time of drug treatment. Neither the patients nor the staff responsible for the behavioral rating of the patients (10, 11) were aware whether the capsules given were L-dopa or placebo. Any day with an elevated rating on the mania scale and one day preceding and following such days were omitted from the analysis.

The initial study utilized data obtained for the purpose of establishing an L-dopa dose-response relationship and consisted of three to seven 24-hour urine samples from each of four depressed patients who developed hypomania and from four patients who did not develop hypomania. Although the samples had originally been chosen only as representative of low, medium, and high dosage ranges for each patient, and not for the bipolar-unipolar comparison, the two patient groups were found to be very similar when age, sex, and the dosage and duration of L-dopa treatment were compared, using the averages from the days of the catecholamine assays (table 1).

RESULTS

As indicated in table 2, the patients who developed hypomania excreted more than twice as much dopamine and L-dopa during L-dopa treatment as did the unipolar patients, although the HVA levels were much less dissimilar. A comparison of the least-square regression plots of dopamine excretion versus L-dopa dosage for the two groups (figure 1) revealed significantly different slopes ($p < .01$) and did not suggest that the nonsystematic selection of samples for analysis had biased the data.

A replication of these results was attempted by studying the 24-hour urinary excretion levels of dopamine, L-dopa, and HVA following the administration of an acute L-dopa load of 2 gm. per day (500 mg. at 9 a.m. and at 1, 4, and 9 p.m.) in six bipolar and six unipolar hospitalized depressed patients. Although the initial results (see figure 1) would have predicted greater differentiation of the two patient groups if higher L-dopa doses were used, nausea and other side effects prohibited initial doses over 2 gm. per day. Nonetheless, as indicated in table 3, urinary excretion of dopamine was again found to be two to three times greater in the bipolar patients.

After the acute L-dopa load, the differences in L-dopa and HVA excretion were nonsignificant. Prior to treatment with L-dopa, the dopamine and HVA excretion rates were not significantly different in the two groups (table 3). Age, sex, and weight were similar in both groups. There were no rated changes in mood or behavior in either group of depressed patients when the day of L-dopa administration was compared with the two days on placebo before and after the administration of L-dopa.

DISCUSSION

These results indicate that bipolar depressed patients

TABLE 2
Effects of Chronic L-dopa Treatment on Excretion of L-dopa, Dopamine, and HVA

Substance	Depressed Patients With Hypomanic Episodes (N=4, Samples=28) Mean mg./24 hr. ± S.E.M.	Depressed Patients Without Hypomanic Episodes (N=4, Samples=21) Mean mg./24 hr. ± S.E.M.	Significance
L-dopa	37 ± 13	11 ± 3	$p < .10$
Dopamine	241 ± 56	84 ± 27	$p < .05$
HVA	1120 ± 200	910 ± 330	n.s.

TABLE 3
Effects of Acute L-dopa Treatment on Excretion of L-dopa, Dopamine, and HVA

Substance	Bipolar Depressed Patients (N = 6) Mean mg./24 hr. ± S.E.M.	Unipolar Depressed Patients (N = 6) Mean mg./24 hr. ± S.E.M.	Significance
Before L-dopa			
Dopamine	0.17 ± .04	0.21 ± .03	n.s.
HVA	4.97 ± .67	5.82 ± .71	n.s.
L-dopa (2 gm./24 hr.)			
L-dopa	7 ± 1	5 ± 1	n.s.
Dopamine	64 ± 12	26 ± 4	$p < .02$
HVA	394 ± 65	380 ± 98	n.s.

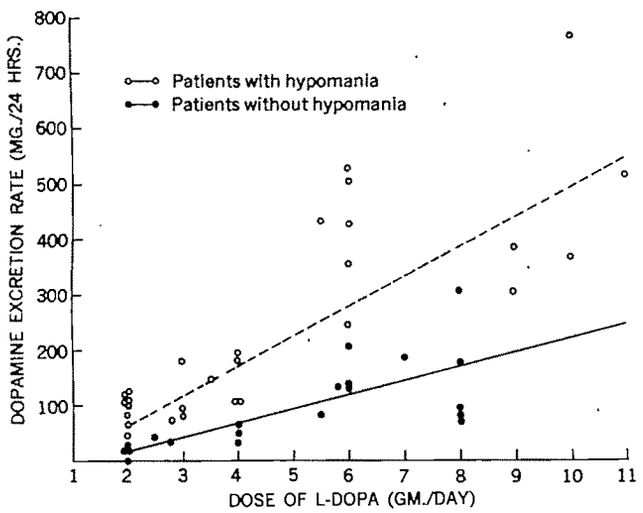
excrete more urinary dopamine in response to an L-dopa load than do unipolar depressed patients, and that this difference increases with increasing L-dopa dosage. The urinary dopamine values for the bipolar and unipolar depressed patients fall at the upper and lower limits, respectively, of those observed in parkinsonian patients treated with L-dopa (12). Strom-Olsen and Weil-Malherbe (13), Sloane and associates (14), and Messiha and associates (15) have documented increased rates of urinary dopamine excretion during spontaneously developing mania, but urinary dopamine excretion in bipolar versus unipolar patients during depression has not previously been compared.

Abundant evidence from studies of experimental animals and patients with Parkinson's disease indicates that psychomotor activity can be closely correlated with brain dopamine levels. In animals, L-dopa administration leads to marked elevations in brain dopamine, with a close correlation between dopamine levels and increased motor activity (7); in contrast, brain norepinephrine levels are only minimally increased, or may actually be reduced, during L-dopa treatment (7, 16).

The development of hypomania during L-dopa treatment in eight out of nine bipolar depressed patients but only one out of 12 unipolar patients, as reported previously (1), together with the present results showing increased dopamine excretion in the bipolar patients during L-dopa administration, suggests that the increased psychomotor activity observed during hypomania and mania might represent the behavioral effects of increased levels of dopamine formed from L-dopa.

It remains to be determined whether this difference in L-dopa metabolism can be related to specific (6) or nonspecific alterations in the absorption or excretion of amino acids, to reported enzyme differences between these two groups (17, 18), or to other factors capable of influencing catecholamine metabolism. For example, it is not possible to exclude the possibility that subtle increases in motor activity in the bipolar patients might have led secondarily to the increased rates of urinary dopamine excretion observed in this study. Assessment of this question requires the measurement of dopamine and its metabolites in areas closer to the central nervous system.

FIGURE 1
Comparison of Dopamine Excretion Rates in Two Groups of Depressed Patients



SUMMARY

During L-dopa administration, bipolar depressed patients excreted more urinary dopamine than did unipolar depressed patients. This difference increased with increasing L-dopa dosage. Since the bipolar patients also exhibited a differential sensitivity to the development of hypomania and mania during L-dopa treatment, these results suggest that changes in dopamine metabolism may be implicated in the development of hypomania and mania.

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The Pharmacology of Tardive Dyskinesias

BY HAROLD L. KLAWANS, JR., M.D.

The activity of dopamine at certain striatal dopamine receptors is related to the appearance of tardive dyskinesias in man. By analogy to Huntington's chorea and L-dopa-induced dyskinesias in parkinsonism, it appears that tardive dyskinesias are related to increased responsiveness of dopamine receptor sites as a result of neuroleptic-induced denervation hypersensitivity. It has been demonstrated that anticholinergic drugs worsen tardive dyskinesias in patients who have this disorder. It also appears that anticholinergic drugs decrease the threshold for tardive dyskinesias and thereby increase the incidence of this disorder. This implies that centrally active anticholinergic agents should not be used as a routine adjunct to neuroleptic therapy.

LINGUAL-FACIAL-BUCCAL dyskinesias are abnormal, involuntary, persistent movements of the tongue, lips, and facial muscles (1). Movements of this nature were first described as an integral part of the hyperkinesia of Huntington's chorea and other choreatic states. They occur as a rare spontaneous movement disorder in elderly patients without known cause; the term bucco-lingual masticatory or oral masticatory syndrome has been employed to describe this syndrome. It is quite likely that in this setting these movements may be related to senile chorea. Similar movements are frequently seen as a side effect of long-term L-dopa therapy of parkinsonism. In the last two decades analogous movements have been observed as a late, or tardive, and frequently permanent complication of long-term neuroleptic therapy (2–4). The term tardive dyskinesia is usually used to describe this disorder.

The pathogenesis and pathophysiology underlying these abnormal movements remain a matter of conjecture in all four settings. The relationship of a variety of pharmacologic agents to all of these has certain implications as to the pathophysiology of these movements. These observations shed some light on the mechanism that triggers the movements seen in tardive dyskinesia. Inferences as to the etiology and therapy of tardive dyskinesias can also be drawn from these observations.

Tardive dyskinesias occur in patients who have been treated with large doses of neuroleptics for long periods of time (4). It is possible that brain damage may in some cases predispose a person to dyskinesia, but brain damage does not seem to be a necessary factor. Tardive dyskinesias appear only late in the course of neuroleptic therapy. Lingual-facial-buccal movements are the commonest hyperkinesia seen in this syndrome, but limb and

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truncal chorea also occur (5). These movements may persist for years and may even become permanent despite the discontinuation of the drug (6–9). Often these dyskinetic movements first appear after a reduction in dosage or after discontinuation of phenothiazine therapy (3, 10).

The neuroleptics that have been reported to produce tardive dyskinesias after prolonged usage are the same agents that regularly result in drug-induced parkinsonism. Van Rossum (11) has hypothesized that chlorpromazine and other neuroleptics act by blocking dopamine receptors in the central nervous system. The competitive blockade by neuroleptics of dopaminergic receptors has been implicated as the basis of neuroleptic-induced parkinsonism (12). Neuroleptics, by instituting a blockade of these receptors, may produce a "chemical denervation" of the dopamine receptors of the striatum. If the blockade is complete at any receptor site, then this receptor is prevented from receiving its normal neurotransmitter (dopamine) input.

It is possible that after such prolonged chemical denervation some receptors may develop denervation hypersensitivity. Neurons whose dopamine receptors have developed this denervation hypersensitivity may respond in an abnormal manner to any dopamine that reaches these receptors. It is quite possible that tardive dyskinesias may be the overt manifestation of the abnormal response of such neurons.

The phenomenon of denervation hypersensitivity is well known in peripheral receptor sites, and the experimental work of Ohye and associates (13) on the nigrostriatal pathway suggests that an analogous phenomenon may occur centrally. The nigrostriatal pathway is composed of neurons whose cell bodies are the melanin-containing neurons of the substantia nigra and whose axon terminals are spread diffusely throughout the ipsilateral striatum (caudate and putamen). The neurons of the substantia nigra influence the neurons of the striatum by releasing dopamine onto them. When the nigrostriatal pathway is destroyed, the amount of dopamine available to act at the striatum is markedly diminished. Ohye and associates (13) found that when one putamen is dopaminergically denervated by the interruption of the ipsilateral nigrostriatal pathway, the rate of spontaneous firing of that putamen is markedly increased. This may be related to the observation that the majority of striatal neurons are inhibited by dopamine (14, 15). The increased rate of firing seen after unilateral interruption of the nigrostriatal pathway may represent a release from such inhibition.

Ohye and associates (13) also found that application of L-dopa to the putamen on the side of the lesion produced a marked and rapid increase in the rate of firing of that putamen. An increased rate of firing due to the application of L-dopa is seen only in the denervated putamen, implying that the neurons are reacting abnormally to L-dopa (dopamine) as a result of their partial denervation. This study provides evidence in support of the theory that denervation can bring about alterations in receptor site sensitivity and responsiveness to dopamine in the central nervous system.

L-DOPA-INDUCED DYSKINESIAS

There is also clinical evidence which suggests that receptor site sensitivity to neurotransmitters may be altered in other disease states that show lingual-facial-buccal dyskinesias similar in appearance to those seen in tardive dyskinesias. The L-dopa-induced dyskinesias in parkinsonism are thought by several workers to be an example of such denervation hypersensitivity. Cotzias and associates (16) proposed that the dyskinesias are not inherent in L-dopa itself but are a result of the "interaction of the drug with the pathological parkinsonian neurosubstrate." The low incidence of L-dopa-induced dyskinesias in normal individuals (17) suggests that the occurrence of the L-dopa-induced dyskinesias in parkinsonian patients is a result of the action of dopamine upon neurons that are characteristic of the brains of these patients. These neurons are apparently altered in a manner that increases their susceptibility to L-dopa-induced abnormal movements. It is possible that the mechanism underlying such an alteration of neuronal response to dopamine is the development of denervation hypersensitivity of the dopamine receptors.

Degeneration of the neurons of the substantia nigra is the most consistent pathologic alteration in parkinsonism (18). This degeneration of the nigrostriatal pathway produces a denervation of the striatal dopamine receptors. As a result of this denervation these receptors may go through a stage when they are hypersensitive to dopamine. L-dopa therapy could activate these hypersensitive receptors excessively and lead to dyskinesias. The lower incidence of dyskinesias on the less involved side in hemi-parkinsonism and the failure to produce dyskinesias in subjects without parkinsonism are consistent with the hypothesis that there must be significant dopamine denervation and a resulting hypersensitivity of the dopamine receptor before L-dopa-induced dyskinesias can occur.

It is unreasonable to maintain that L-dopa would never produce abnormal movements in normal individuals. "Normal" here would mean individuals who have no signs, symptoms, or history of extrapyramidal tract disease and who have never received phenothiazines. Neuronal degenerative changes of the striatum do occur during the aging process, and movements similar to those induced by L-dopa can and do occasionally occur spontaneously in older people. If it is assumed that dopamine produces these movements, L-dopa may bring them out in some percentage of elderly patients. It is also possible that large doses may occasionally elicit these movements in younger patients, but this is rare.

The theory that denervation hypersensitivity of dopamine receptors predisposes the system to abnormal receptor response is incomplete in that it disregards the observation that there are two different sets of dopamine receptors within the striatum. The initial studies on the

striatum emphasized that dopamine has an inhibitory effect on most striatal neurons (19). Recent work has shown that a significant percentage of the dopamine-responsive caudate neurons are actually facilitated by dopamine. In one such study, York (20) found that following the administration of iontophoretic dopamine, 53 putamen neurons showed facilitation, while 37 putamen neurons showed inhibition.

TWO TYPES OF RECEPTORS

The various physiological studies suggest that there are two separate nerve cell populations in the striatum: a dopamine-facilitated nerve cell population, which possesses predominantly or exclusively facilitory dopamine membrane receptors, and a dopamine-inhibited nerve cell population, with predominantly or exclusively inhibitory dopamine membrane receptors. It has been suggested that in Huntington's chorea the predominant defect occurs at the dopamine-facilitated neuron (21).

Pathologic evidence suggests that the small striatal neurons are dopamine-facilitated and that their involvement in Huntington's chorea is directly related to the production of chorea (21). The larger striatal neurons are dopamine-inhibited, and involvement of these cells in Huntington's chorea is manifested by hypokinesia and rigidity (22). It has been proposed that dopamine initiates chorea as a result of the altered response of dopamine-facilitated striatal neurons to normal amounts of this transmitter (23). In contrast to normal dopamine-facilitated neurons, the altered neurons are thought to discharge abnormally and perhaps hypersynchronously in response to dopamine stimulation. This type of response could produce the choreiform movements seen in Huntington's chorea and perhaps in tardive dyskinesia.

The existence of two populations of dopamine receptors that respond differently to the same neurotransmitter is not surprising, since the response of a receptor to a transmitter is a property of the receptor site and not of the transmitter molecule. The differences between these two types of receptors is significant in the pathophysiology of tardive dyskinesias. The two types of dopamine receptors are not equally susceptible to neuroleptic-induced blockade; the dopamine-facilitated neurons are blocked by levels of haloperidol or chlorpromazine that do not block the action of dopamine at dopamine-inhibited receptor sites.

This observation, together with the observation that tardive dyskinesias can occur independently of drug-induced parkinsonism, suggests that the drug-induced hyperkinesia is related to receptors that are not identical to those related to drug-induced, and presumably idiopathic, parkinsonism. Tardive dyskinesia may be visualized as an abnormally hyperactive response of the dopamine-facilitated receptor to dopamine, while drug-induced parkinsonism is related to a lack of response of the dopamine-inhibited receptors to dopamine.

Prolonged denervation of dopamine receptors may lead to prolonged or permanent abnormalities of these receptors. This may explain the often prolonged or permanent nature of these dyskinesias. Finally, the fact that phenothiazine-induced dyskinesias often make their first appearance after dose reduction or drug withdrawal could be explained by the assumption that a decrease in the striatal level of the neuroleptic would permit more of the dopamine to reach the sensitized dopamine receptors. The occurrence of these movements during neuroleptic therapy suggests that the competitive blockade can be overcome by endogenous dopamine.

Reserpine can produce a state of rigidity and akinesia resembling parkinsonism (24). In this way it resembles phenothiazines. However, reserpine does not induce tardive dyskinesias. This can be explained by its mechanism of action. The main action of reserpine is to prevent the storage of dopamine in intraneuronal granules by blocking the uptake into these granules (25). In this way, reserpine depletes the brain of dopamine and may produce akinesia and rigidity. However, it does not block dopamine receptors and consequently does not produce a "chemical denervation" of the receptors. If denervation hypersensitivity is significant in the production of tardive dyskinesias, reserpine would not be expected to produce tardive dyskinesias.

If receptor-site hypersensitivity to dopamine is causally related to the production of these abnormal movements, these movements should be increased by L-dopa, which increases the striatal dopamine concentration. This has been the experience of Hippius and Logemann, who studied a large group of patients with various tardive dyskinesias (26). When given single slow intravenous injections of 100 mg. of L-dopa, 12 of these 40 patients developed worsening of the abnormal movements. These authors felt that the enhancement of the hyperkinesias by L-dopa was related to the effect of L-dopa on the extrapyramidal system. It is most probable that the exacerbation of these movements by small doses of L-dopa is related to receptor-site hypersensitivity to dopamine.

AN EXAMPLE OF HYPERSENSITIVITY

The relationship of L-dopa, and presumably dopamine, to tardive dyskinesia is further exemplified by the patient described by Klawans and McKendall (27). They observed a single patient with persistent neuroleptic-induced tardive dyskinesias who had been placed on L-dopa. After she had received L-dopa for a few days, her facial dyskinesias increased markedly and she developed severe choreoathetotic movements of the extremities and trunk. Despite the discontinuation of L-dopa, the involuntary movements persisted for several weeks. The worsening of the patient's movement disorder by the institution of L-dopa therapy suggests that dopamine is in some way related to the pathogenesis of the abnormal movements. The level of homovanillic acid in the patient's cerebrospinal fluid was normal and suggested that there was a normal turnover of dopamine. This is evidence that the patient's abnormal movements were related to hyper-

sensitivity to dopamine rather than to increased dopamine synthesis.

This patient's movements later responded to treatment with haloperidol. The improvement of the movements following dopaminergic blockade by haloperidol is consistent with the observation of Delay and Deniker (28) that reinstitution of neuroleptics is the most successful means of suppressing tardive dyskinesias and also supports the importance of dopamine in the pathophysiology of the movements. Other therapeutic approaches have been tried. Villeneuve and Boszormenyi have shown that reserpine is of some value in the treatment of this disorder (29). Brandrup (30) and MacCollum (31) have used tetrabenazine to ameliorate these movements. Both tetrabenazine and reserpine deplete cerebral and striatal dopamine concentrations and thereby decrease the amount of dopamine available and able to act at dopamine receptors.

The discussion of lingual-facial-buccal dyskinesias has thus far focused on the striatum and the dopaminergic input to the striatum. There are at least two other neuronal systems that are known to have inputs in the striatum. These are the serotonergic system and the cholinergic system. The cholinergic system acting at the striatal cholinergic receptors has been shown to exert an influence on the striatum opposite to that of dopamine (20). A balance of dopaminergic and cholinergic influence upon the striatum is necessary for normal functioning of the striatum (12, 14). Since the cholinergic and dopaminergic systems have a mutually antagonistic effect upon the striatal cells and a balance is necessary for normal function, alteration of the effect of one system may modify the effects of the other.

Altering the cholinergic input to the striatum can alter the effects of the dopaminergic system on the striatum. This has been demonstrated best in Huntington's chorea.

EFFECTS OF ANTICHOLINERGICS

Patients with Huntington's chorea often present with movements that are similar in appearance to tardive dyskinesias. The pathophysiology of Huntington's chorea is also felt to relate to altered sensitivity of the striatal dopaminergic receptors to dopamine. Patients with Huntington's chorea, when given anticholinergic drugs, show a marked exacerbation of the abnormal involuntary movements (32). If the mechanism of tardive dyskinesias is similar to that in Huntington's chorea, it would be expected that anticholinergic medications could exacerbate the symptomatology in tardive dyskinesias. Institution of anticholinergic regimes for patients with tardive dyskinesia has in fact been found to worsen the abnormal movements (3). It is important to note this because many patients with diseases of the extrapyramidal system are treated with anticholinergics, although the efficacy of anticholinergic therapy has been demonstrated only in parkinsonian syndromes.

Many patients who are on long-term neuroleptic therapy are also given long-term anticholinergic medications in order to reduce the parkinsonian syndrome induced by neuroleptics. While anticholinergics may mask drug-induced parkinsonism, they may also increase the intensity and duration of tardive dyskinesias in any patient who is prone to develop this type of abnormal movements (3). They also worsen chorea in choreatic patients on neuroleptic therapy (32). The attempt to relieve one of the neurological complications of neuroleptic therapy may promote the appearance of another, more severe, longer lasting, and less reversible neurological complication.

Besides prolonging and potentiating tardive dyskinesias, there is some evidence to suggest that anticholinergic drugs may alter the threshold for the appearance of tardive dyskinesias. Anticholinergic agents may not only increase the severity of tardive dyskinesias in patients prone to this type of movement disorder but may also increase the incidence of tardive dyskinesias by altering the threshold for the appearance of these movements. This concept suggests that inhibition of the cholinergic system, which normally antagonizes the dopaminergic system, produces a physiologic state in which the amount of dopamine acting at dopaminergic receptors necessary to produce lingual-facial-buccal dyskinesias is decreased. Because of this, amounts of dopamine too small to induce tardive dyskinesias in a patient not on anticholinergics may well be able to induce them in a patient who is receiving anticholinergics.

This suggests that the incidence of tardive dyskinesias should be greater in patients receiving both neuroleptics and anticholinergics than in patients receiving neuroleptics alone. This appears to be true. Crane (33) has tentatively suggested that adjunctive anticholinergic medication increases the risk of development of tardive dyskinesias. Since most patients receiving long-term neuroleptic therapy do not require anticholinergic drugs (34), it appears that the routine use of these as an adjunct to neuroleptic therapy is not justified.

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Biological Psychiatry

BIOLOGICAL PSYCHIATRY has undergone a revolution in the last 20 years. For hundreds of years some psychiatrists have believed that biological factors may cause mental illness, but such theories were at the speculative stage of broad sweeping theoretical statements, nonspecific in nature, that have characterized the prescientific stage of any science. Indeed, these speculations were not so much a scientific theory but more a statement of faith that biological factors did underlie the more serious mental diseases. The discoveries that antipsychotic drugs could help schizophrenic patients, that antidepressant drugs and lithium could help patients with affective disorders, that minor tranquilizers had anti-anxiety properties, and that methadone maintenance was a useful treatment for narcotic addicts have brought chemical means of treatment to a great many psychiatric patients.

Stimulated by these discoveries, the pharmacology of these agents has been rapidly elucidated with a fast and substantial advance in biochemical pharmacology in the last 20 years. Since there are a number of antipsychotic agents that benefit schizophrenia, it is reasonable to speculate that a common mechanism of action shared by all these drugs may be a clue to the biochemistry of schizophrenia. All these agents cause extrapyramidal side effects. Furthermore, it is known that Parkinson's disease is associated with low brain dopamine levels and that antipsychotic drugs block central dopaminergic receptors, implicating dopamine in the drug-produced extrapyramidal side effects.

In this issue of the *Journal*, Snyder reviews this evidence and speculates that dopamine may be involved in schizophrenia. He notes that amphetamine psychosis is very similar to paranoid schizophrenia and that one of the most important biological actions of amphetamine is to release dopamine centrally. Recently, Janowsky and associates (1) showed that a relatively small dose of intravenous methylphenidate, another dopamine releaser, can markedly activate schizophrenia in patients who are actively psychotic, while an identical dose does not have any psychotomimetic effect in normal subjects. That is, schizophrenics respond differently to an identical dose of this drug than normals, another pharmacologic clue implicating dopamine or dopamine-like compounds in the etiology of schizophrenia.

In this issue of the *Journal*, Klawans suggests that tardive dyskinesia may be the result of the increased responsiveness of dopamine receptor sites that occurs as a result of neuroleptic-induced denervation hypersensitivity. In this case, these very serious long-term clinical side effects may be the result of secondary changes involving the same neurotransmitter. Furthermore, in this issue Murphy notes that bipolar patients who respond to dopa ingestion with hypomanic episodes excrete more dopamine than do unipolar patients who do not respond to dopa ingestion with hypomanic episodes. This provides a pharmacological clue toward the biology of mania. Klawans suggests that the presence or absence of dyskinetic movements is controlled by a balance be-

In this section the Editor samples varied opinions on topical problems. The opinions expressed herein are not necessarily those of the Editor, nor can they in any way be construed as marking the official policy of the Journal.

tween dopaminergic and cholinergic systems. Janowsky and associates (2) showed that one could markedly reduce manic symptoms through increasing the levels of brain acetylcholine by administering physostigmine. There is much evidence from animal studies that a balance exists between dopaminergic (or noradrenergic) and cholinergic systems, and we have suggested that disorders of affect may involve a balance between cholinergic and adrenergic systems (3). The methodologic studies of Post, Goodwin, Bunney, and their co-workers also add important data about the involvement of serotonin in depression.

The trial of rubidium is also partly motivated by its biological effect on biogenic amine systems or on behavior under the control of biogenic amines in animals. It should be added parenthetically that, since rubidium has such a long half-life, it may be a particularly dangerous drug to study in early clinical drug evaluation. These studies are representative of research that is leading to a rapid increase in our knowledge about the function of neurotransmitters in man and their relationships to underlying psychiatric disease and to drug-produced side effects.

Regardless of how productive theories are, there is no doubt that many of the side effects produced by psychotropic drugs relate to their effects on neurotransmitters. It is important that psychiatrists have some understanding of biochemical pharmacology so that they can have an appreciation of the mechanisms involved in these side effects. Since a full understanding of the concepts of biochemical pharmacology that underlie the research in this issue of the *Journal* is more than that provided in most psychiatric residency training programs, many psychiatrists may find this research somewhat confusing and perplexing. In most residency training programs, psychiatrists are well trained in psychoanalytic theory, historically the first breakthrough of modern psychiatry. Now, with the application not only of psychoanalysis but also of psychological theories and sociological thinking, there are many different disciplines that underlie psychiatry, more than any one man could know. It would follow that a balanced psychiatry department should have experts in most of the various subspecialties of psychiatry who would perform research, train residents in their area of knowledge, and provide a resource for practicing psychiatrists in the community. The papers in this issue illustrate the rapid progress in biological psychiatry. This is but a small part of the rapidly advancing field of biological psychiatry, and it strongly implies that this subspecialty should be among those included in a balanced psychiatric program.

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A Year of Change—A Card of Thanks

THIS JANUARY 1973 ISSUE of the *Journal* marks the beginning of volume 130. Volume 129 was made up of only six issues. (We warned about this change in the last several issues; it was made because there appears to be an advantage in having each volume correspond with the calendar year.) We are making this change at the same time that we are instituting changes in format, typography, and page layout. For, as is evident, the *Journal* has changed to a new "A" size. Notice of this was also given in the last issue.

These changes have not been made lightly; in fact, some of us note them with real regret. Despite some production troubles there was a solidity and a certain amount of assurance that came with our green journal, though we sometimes had trouble keeping the green cover green. The *Journal* kept up with the times in editorial content and it will do so in its new dress; the Editorial Board and the staff will see to that.

In the past year the flood of unsolicited manuscripts was the highest ever. Adding these to our annual meeting papers has nearly inundated the *Journal* office. The flow seems to increase exponentially, and we take this as a mark of confidence and approval.

We have had to give up reviewing papers intended for the next annual meeting in advance of the meeting. We did review them early last year, and in some cases it resulted in our reading papers four times, since they were returned from the authors with modifications that had been suggested by reviewers at various stages. This increased the work load so much that we now intend to start the review process only after the papers have been presented at the annual meeting.

Each manuscript we receive is seen by one or more capable reviewers before the final decision is made to accept, modify, or reject. That we miss sometimes is understandable, but the decision is never made hastily; in fact, we agonize over some of the papers a great deal before the final decision is reached.

It is readily understandable that to make proper decisions the Editor must seek help from knowledgeable colleagues, although in the end the final decision is his. The calls made upon these colleagues are often time-consuming and may be a burden to the person asked to help. Unfortunately, the *Journal* is not in a position to repay these colleagues as they should be repaid. Therefore the least we can do is to publicly acknowledge our indebtedness to them. This is usually done in the January issue at the time that the Editor and staff convey to them and all of the *Journal*'s readers their best wishes for health and happiness in the year ahead.

This year our good wishes are even more poignant, for as this is written the nation is upset and in an unhappy, disbelieving mood. We hope that the New Year will see us at peace so that we can solve some of our own home-grown problems. A number of these problems affect our specialty. More than ever we are a part of the community, and there are marked changes ahead for our own discipline and all of medical practice.

The names of those colleagues and friends whom we have called upon for help of some sort from November 1, 1971, to November 1, 1972, are listed below.

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Invariably in an operation of this size someone's name will be omitted. We apologize in advance for this and hope that we will be informed of any errors of omission or commission.

To Drs. Walter E. Barton, Donald W. Hammersley, Henry H. Work, and Hugh Carmichael, and to Mr. Robert L. Robertson, Mr. Raymond M. Glasscote, and Ms. Jean Jones—all of the APA staff—go our special thanks for their courteous assistance and cooperation.

To Dr. Hayden Donahue for his understanding of our fiscal problems, and to the other officers and members of the Association for their patience and forbearance, go our thanks and best wishes for the New Year.

F.J.B.

Depression in the Menopause

BY GEORGE WINOKUR, M.D.

The author studied 71 women who had an affective disorder either before or after the menopause to determine if they were at greater risk for depression during the menopause than during other times of the life span. The difference was not significant: there was a 7.1 percent risk of developing an affective disorder during the menopause and a six percent risk during other times.

CLINICIANS have long been interested in the impact of the menopause. The concept of involutional melancholia is based on the idea that the menopause has significant psychological and physiological effects that lead to a serious depression in predisposed individuals. However, it is possible that depressive episodes around the time of the menopause may simply be chance occurrences. Such would be the case if the risk for depression were increased in the ages during which the menopause occurred without the menopause itself contributing to the development of the depression. It is possible that the relationship of menopause to depression is simply fortuitous.

Slater has calculated the risk for a first attack of manic-depressive disease during the life span (1). About 20 percent of the first attacks occur in each of the three decades between 30 and 59 years of age. Since the decades between ages 40 and 59 are the time when a great number of menopausal periods occur, as well as 40 percent of the first episodes of manic-depressive illness, it is not surprising that depression and the menopause have been associated by the physician. In this paper I have attempted to determine if menopause increases the risk of depression in patients who have had an affective episode independent of the menopausal state.

METHOD

Of patients with an affective disorder, 76 consecutive admissions were chosen for the study, using the criteria of Cassidy and associates (2). The presence of several symptoms such as insomnia, anorexia, psychomotor retardation, tiredness, and difficulty in concentrating were needed for the diagnosis. This illness had to be superimposed on adequate adult functioning, and no other psychiatric or medical diagnosis could have seemed probable. These patients could have been diagnosed in the categories of manic-depressive illness, psychotic depressive reaction, and involutional melancholia. Five women who had an affective disorder associated with a postpartum state were eliminated, leaving 71 consecutive female admissions with a diagnosis of affective disorder. Twenty-eight women in the study had passed the menopause, which was defined as lasting three years following the age the patient gave for its onset.

An episode of illness in the women was expressed in terms of a period of time; a subject could have had only one episode a year.

Two formulas were used. For the entire group of 71 women the risk for occurrence of an episode of illness equaled the number of episodes (defined as a period of time) divided by the total numbers of years at risk for the population. The risk was expressed as a percentage of the years at risk that were associated with an affective episode.

This computation was then compared with the risk for the occurrence of an episode of illness in association with a specific event (in this case, menopause). This equaled the number of episodes (defined as a period of time associated with the event) divided by the total number of years at risk for the event.

RESULTS

In the group of 71 patients there were 125 episodes of psychiatric illness and 2,095 years of risk. Using the number of episodes as the numerator and the years at risk as the denominator, it was found that six percent of the years at risk were associated with a psychiatric illness. To obtain the number of years at risk each patient was dealt with individually, and the computation was made for the number of years at risk between ages 20 and 80. The greatest number of years that a person could be at risk would be 60, and the least would be five if the person was

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This work was supported in part by Public Health Service grants MH-11396 and MH-05911 from the National Institute of Mental Health.

older than 20. The computation of the period at risk for these 71 patients was described in a previous paper (3).

Of the 28 women in the study who had passed the menopause, all reported expected menstrual changes. During the menopause 21 (75 percent) reported nervousness; 10 (36 percent), depression; 10 (36 percent), insomnia; 18 (64 percent), hot flashes; 9 (32 percent), fatigue; 8 (29 percent), palpitations; and 2 (7 percent), difficulty in concentration and thinking. Since these symptoms are similar to those which patients suffering from affective disorder complain of, it was necessary to define an affective episode that occurred during the menopause as one in which there had been a hospitalization within three years of the age the patient gave for the occurrence of the menopause. Six of the 28 patients reported that such an association took place. Using the formula cited before: rate $= \frac{6}{28 \times 3}$ = 7.1 percent. Therefore, 7.1 percent of the years at risk were associated with a hospitalization for an affective episode. This percentage is not significantly different from the rate for the total group of 71 female patients (6 percent).

Nine patients had an illness prior to menopause. Of these, seven were free of illness that required hospitalization during the three-year period of risk for menopause, while two were not.

DISCUSSION

From the current data menopause does not seem to be an important factor in precipitating an episode of affective disorder. That it has been so considered may well be the result of the chance association of menopause and affective disorder and of a third factor, age.

There are possible sources of error in the kind of workup that is presented here. An episode of illness that occurred in the menopausal period had to be defined as contingent upon a hospitalization, whereas during other times of the risk period, an episode was defined as a set of symptoms associated with some social incapacity. This partial change in definition of an affective episode could obscure some differences between the ordinary period of risk and the period of risk during the menopause.

The majority of patients in this study were depressive; few had had any mania. The patients were not, however, divided into two groups—those with mania and those without mania. It would be of interest to determine the effect of menopause on the two groups, i.e., patients who have depression only and patients who have mania and depression. The separation between unipolar and bipolar affective psychoses seems to be a viable one, both clinically and genetically; it would be useful to evaluate possible precipitants, such as the menopause, separately for the two groups (4).

Finally, from the data presented here there seems to be little value in looking specifically at the menopausal state for clues to the etiology of ordinary affective disorder in which hormonal changes have been suggested as etiological factors. To some extent this has been a result of the belief that affective disorders are more likely to occur during menopausal states. This does not appear to be true, and one might expect to find no significant leads in such occurrences that would promote further understanding of affective disorder. The numbers in the study reported here are, however, relatively small, and another study might be in order, particularly one that divided the patients with affective disorders into those with and those without mania.

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The Polygraph in a Psychiatric Setting

BY STANLEY ABRAMS, PH.D.

The author discusses the use and validity of the polygraph in a psychiatric setting. By setting up a hierarchy of stress words—some of which are supposed to elicit an emotional response and some of which are not—the psychiatrist can determine specific stress areas by means of the patient's physiological reactions.

THE POLYGRAPH has often been employed in law enforcement, business, and government, but it has been used only rarely in psychiatric settings. Since this instrument does not measure lies but rather emotional responses through physiologic reactions, it could be assumed to be of value in this realm.

The effectiveness of the polygraph has been amply demonstrated in the literature through both laboratory research (1, 2) and the reports of polygraph experts (3–5). In the former, 70 to 100 percent accuracy has been indicated, while polygraphers themselves report 90 to 100 percent validity. A number of criticisms have been leveled against this technique, with the foremost currently being directed toward the right to privacy and the right to avoid self-incrimination. With this as a basis many unions have strongly backed any legislation against the use of the polygraph in business and in government agencies, and because of this, use of this instrument has been reduced to some extent in these areas.

A second objection to the polygraph is related to the training, education, and ethics of the examiners. Most states do not have licensure laws, not due to any lack of activity of the polygraphers but because special interest groups have blocked progress in this direction. Therefore there is no legal reason why anyone cannot buy this equipment and sell his services as an expert in the field.

The polygraphers who have been trained are generally law enforcement officers who have taken a concentrated course that often includes an internship. However, this specialized training is not considered adequate by some since many of these examiners do not have a college degree. The American Polygraph Association is attempting to have licensing laws passed, to set up qualifications for both polygraph experts and polygraph schools, and to develop ethical standards for the examiners.

The final criticism of the polygraph is related to its so-called lack of scientific acceptance. Questions regarding the validity and reliability of the polygraph are difficult to answer because the investigation of this approach is handicapped by weaknesses inherent in the research procedure itself. Experimental findings, even those emerging from a mock crime, cannot be fully accepted as meaningful because the emotions associated with detection in such a case are simply not comparable to the fear of detection operant in an actual crime situation. Trovillo (6) pointed out that "drastic stress" is not part of the experimental situation, for, in contrast to a criminal suspect, the laboratory subject has little to lose. Compare, for example, the penalty of detection for a volunteer subject with that of a murder suspect who wagers his life that he can "beat" the polygrapher. Inevitably the level of validity attained from a hypothetical situation is not comparable to that attained from an actual crime situation.

While this is an obvious weakness that is part of the experimental paradigm, field research also has its failings. There is no way of adequately controlling the examinations given in a typical law enforcement situation. Moreover, verification of the results is never obtained in many polygraph tests. However, when polygraph charts *are* verified, high validity is generally attained (7).

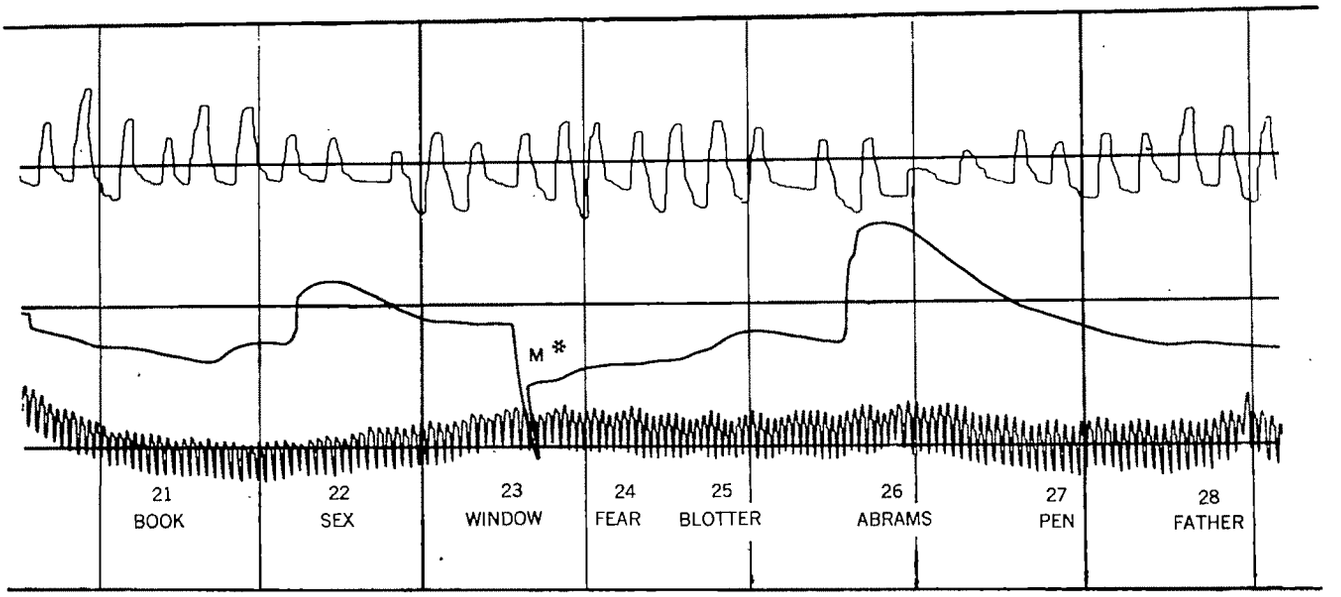
From these statements one can readily see that it is almost impossible to develop an experimental design that will adequately test the validity of the polygraph approach. What is known, however, is that the polygraph is of great value in law enforcement work. It has been a definite aid in recovering losses, in obtaining confessions, and in demonstrating innocence. In some manner demonstrating innocence seems to have been underplayed, but this, according to many attorneys and police officers, is one of the main functions of the instrument.

The polygraph has also been employed by the government to reduce security risks. It has been used not only with those already employed, but with job applicants as well, since it is often more economical and expedient to clarify areas of doubt with the polygraph. Information on medical conditions, use of drugs, or past criminal activity is often more easily obtained with the polygraph than through either interviews or psychometric techniques. Business and government conduct an estimated 200,000 to 300,000 of these tests annually (8).

In the business field polygraphers are often called in to determine who is responsible for financial or material losses, but there is less awareness of its utilization as a preventive measure to reduce theft. Employees may be examined periodically, and the knowledge that these ex-

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FIGURE 1
Polygraph Tracing: Patient 1



*Movement of subject.

aminations will be carried out results in great savings. The unions, as indicated earlier, have objected, claiming that such tests are an infringement on civil liberties. This objection may be well founded; however, it must be pointed out that these business savings are passed on for the benefit of all consumers. The moral question is: Whose rights are at stake, the individual's or society's, the employee's or the employer's?

A number of different manufacturers produce polygraph equipment, but basically the equipment is the same. Most of the equipment used consists of measures of heartbeat amplitude and rate, changes in blood pressure, breathing pattern and rate, and galvanic stimulus response. Basically, any change in these areas is indicative of a change in affective response and, to some degree, it is expected that the greater the emotional reaction, the greater the change in physiologic response. It can be assumed then that a hierarchy of responses can be demonstrated that might be of value in determining areas of significance. This would allow a therapist to test his thinking regarding the dynamics of a patient's problem and could possibly open up new areas of difficulty.

METHOD

In an attempt to determine if such an approach might be of value, 20 patients who had been in treatment were examined with the polygraph. Each patient was given a total of 40 stimulus words alternating between assumed neutral words and words that were thought to be relevant to each individual. The series of words varied with each person. The neutral words served as a basis of comparison with the relevant words and helped to bring each patient's emotional level back down after he had heard a relevant word. An approximate 15-second pause after each word allowed sufficient time to obtain a meaningful tracing in all the physiologic areas. The subjects were instructed to sit perfectly still with their eyes closed and to make no verbal response to the words presented. A Keeler 6308 three-channel polygraph was used.

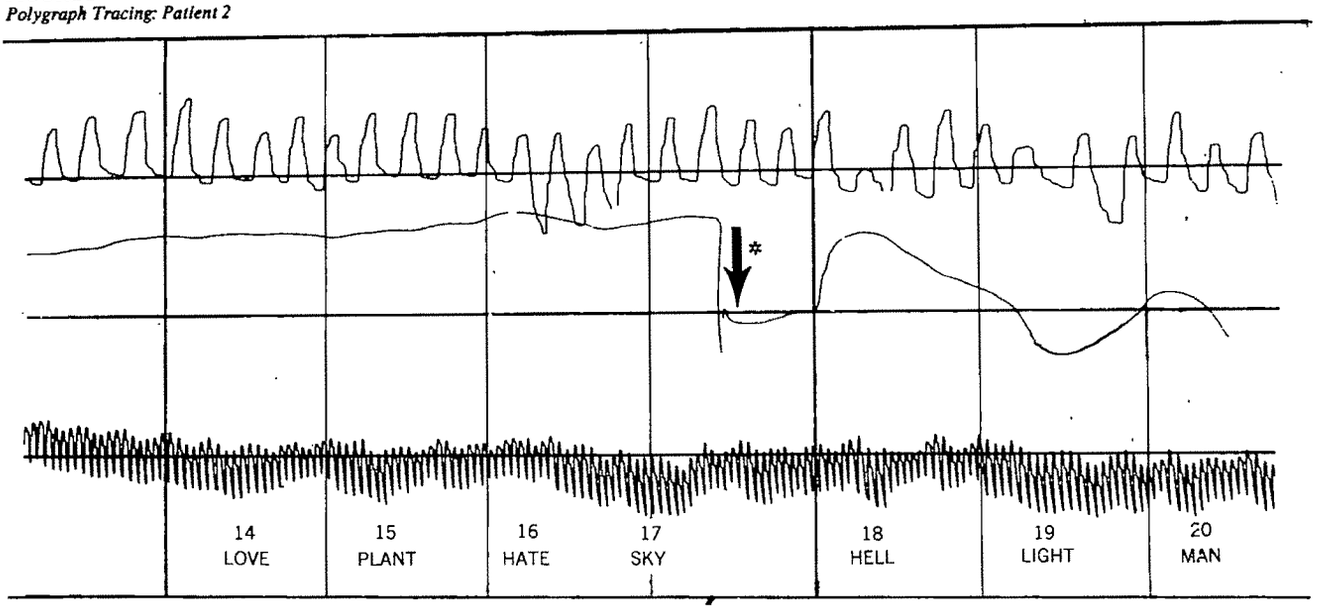
Figure 1 shows a typical set of polygraph tracings. Respiration is at the top, galvanic skin response (GSR) in the center, and a combination of rate of heartbeat and blood pressure at the bottom. The GSR pen is longer than the other two pens so as not to become bound up with them. This results in the GSR tracings being seven seconds behind the other two. The regularly placed vertical lines are 15 seconds apart, which allows the reader to judge how far behind the GSR response is in comparison with the other tracings.

The numbers indicate the specific stimulus words. Any major change in the tracings points up an emotional response, but again, it is not possible to determine which emotional response or combination of responses is elicited. There are about 30 different changes in the tracings that could be indicative of an affective reaction.

DISCUSSION

In figure 1, stimulus word 23, "window," proved to be a poorly chosen neutral word. Instead of the expected lack of response, the patient showed a definite reaction. He later admitted that he had considered committing suicide by jumping out of a window. Note that the response on GSR to the word "window" was greater than to the preceding word, "sex." While there is a response to

FIGURE 2
Polygraph Tracing: Patient 2



*Adjustment of GSR down to center line.

"sex," it does not compare with the GSR response to "window." The respiration response to words 22 and 23 show suppression of breathing, which is another indication of an emotional reaction. Word 26 is the therapist's name. It resulted in a very large GSR response, a slight rise in blood pressure, and suppression of breathing. This is an expected response, registered in all of the physiologic areas, for a patient has many ambivalent feelings toward the therapist. In contrast, the patient reacted relatively little to neutral word 27, "pen." Comparing these words with each other, some insight can be gained as to which ones are more pertinent to the patient.

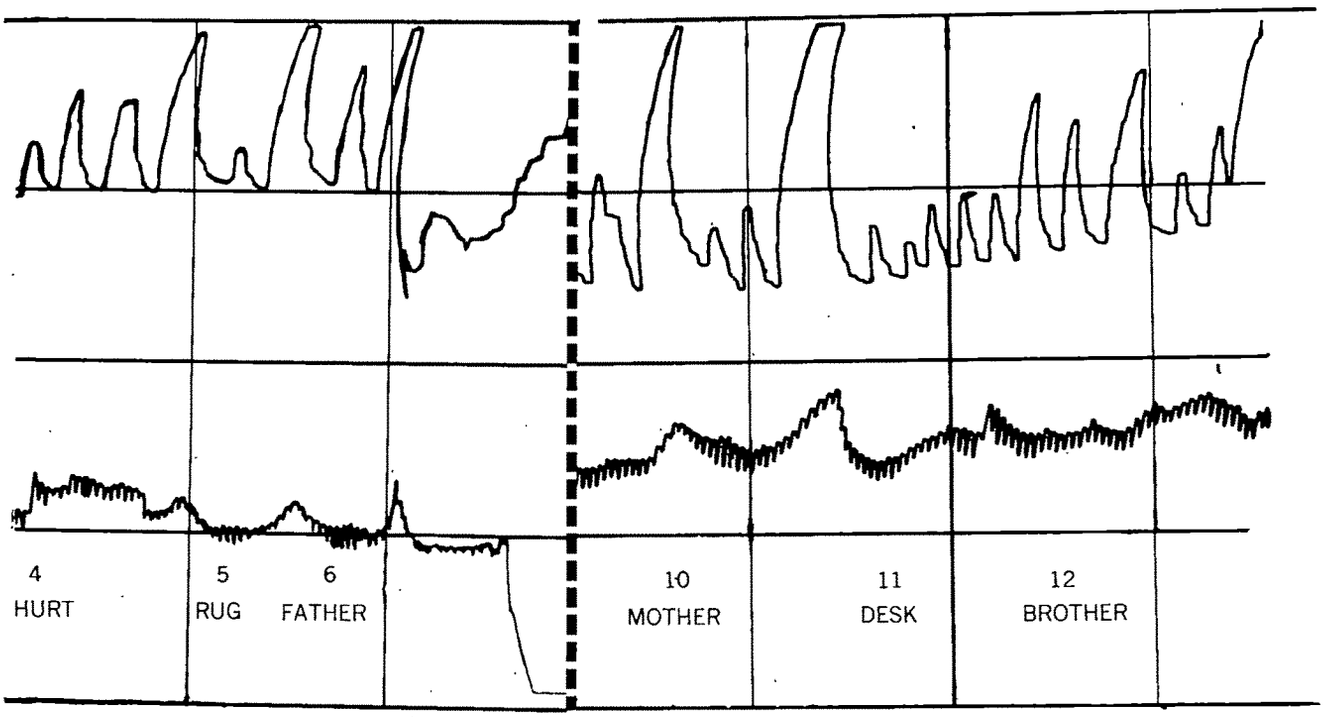
In figure 2 another patient with many thoroughly ingrained moralistic notions gave a large response to word 18, "hell." The diastolic blood pressure increased and the systolic decreased, resulting in a reduced amplitude, which is perhaps one of the best indications of an emotional reaction manifesting itself in terms of blood pressure. The GSR shows a short and sudden increase; at the same time the patient took a sudden short breath such that this stimulus can easily be interpreted as a definite area of difficulty. Again, contrast this reaction to those elicited by word 19, "light" and word 20, "man." Each of these caused a response, but they obviously do not compare with the highly loaded word "hell." Comparing one response with another, it can easily be seen which areas are of most stress to the patient.

The subjects frequently reported surprise at substantial polygraph changes showing great responses to specific stimulus words for which no reaction had been anticipated. It was assumed, therefore, that the feelings associated with these particular words were at an unconscious level. If this is true, then in contrast to earlier assumptions (9), the polygraph is sufficiently sensitive to detect physiologic responses to repressed material. Some corroboration for this is found in a study by Weinstein and associates (10). They demonstrated that while hypnosis could cause amnesia regarding a mock crime and reduce the feelings related to it, the process was not so complete as to remove all of the physiologic responses. It can be assumed from both of these studies that the polygraph can detect emotional reactions to unconscious stimuli but not so readily as it can detect information and affect available to the conscious mind.

A response to assumed neutral words, such as "window," in which the stimulus word had definite significance to the patient at a conscious level, occurs in a lie detection situation as well. While this occurrence could distort the results, it is unlikely, since polygraph examiners typically question a subject when there is a large reaction to a nonpertinent item. Should this reaction occur by sheer chance during a question related to the crime, it would appear as a deceptive response. Such a response would not create a problem, however, since the polygrapher would not make a judgment of deception on the basis of only one question.

When a patient gave a high response to a word that was neutral or for which he did not expect a response, it opened the door to new material that could be dealt with in therapy. Information that undoubtedly would have come out in time was treated more rapidly, with the patients themselves becoming very involved. Each individual went over his tracings with the examiner and took the results almost as a homework assignment in an attempt to understand the reasons for his reactions. Perhaps he dealt with this information only on an intellectual level, but at this point such patient involvement appears to be a valuable aid in the treatment process. Much the same procedure could be employed using some physiologic feedback system associated with Wolpe's ap-

FIGURE 3
Polygraph Tracing: Patient 3



proach of desensitizing a patient with a phobic reaction.

While the majority of patients responded as expected and while some reacted strongly when it was not anticipated, others gave no response to stimulus words that we assumed would elicit one. It was believed that the individuals who did not respond had overemphasized a particular area in therapy to avoid talking about their underlying problem. The more they could talk in this vein, the longer they could avoid the more threatening and significant areas.

It was of interest to note that in a number of instances the response to siblings was greater than to either parent. This corroborated the patients' descriptions of the constant pressure they were under as children from the degrading, haranguing dominance of older siblings. This certainly had as much of a debilitating effect as any poor parent-child relationship. In fact, I feel that the effect of siblings on one another is underestimated and that too much of the credit or blame is given to parents. Note, for example, in figure 3 the difference between the reactions to stimulus words "brother" and "father." The response to the word "brother" is distorted because at this point the patient suddenly began to weep.

CONCLUSIONS

In general the polygraph was found to be of value. It uncovered specific problem areas and allowed the development of a hierarchy of stress words that was useful later in the treatment process. Obviously, it is not possible to use this device as a diagnostic aid, but it does graphically demonstrate how an individual's physiology can present worthwhile information to the therapist. This, of course, is well known and has been employed as part of diagnostic and treatment procedures, as the therapist notes the blushing, perspiring, or trembling of a patient. In addition, the polygraph provides a continuous and measurable indication of a patient's emotional reactions to pertinent stress areas. Because of this, it could be an effective research tool in evaluating desensitization of stress areas, in comparing the therapist's opinions with the physiologic responses of the patients, and in establishing a hierarchy of affective levels.

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An Episode of Acute, Self-Limiting Depersonalization Following a First Session of Hypnosis

BY ELLIOT N. WINEBURG, M.D., AND NORMAN STRAKER, M.D.

A stable subject with a negative medical and psychiatric history developed a self-limited episode of depersonalization after an uneventful hypnotic session. Nothing in the subsequent psychiatric examination, except conscious sexual fantasies during the experience, could have predicted this reaction. The authors believe that all hypnotic subjects should be observed after hypnotic treatment.

AN INTEGRAL PART of the course on hypnosis for psychiatrists at our hospital has been live demonstrations of trance states in normal subjects. Following our usual procedure, one of us announced to a group of hospital employees that volunteer subjects were needed. A reward to the participant was promised in the form of help in eliminating some unwanted habit, such as smoking. The recruiting psychiatrist was alerted to accept only persons who met the following strict criteria: 1) sound ego structure, 2) not prepsychotic, and 3) not currently or previously under psychiatric treatment.

With the encouragement that she could control her smoking habit, a stable young woman volunteered. Long known as a well-adjusted co-worker, she was instructed to come to the hypnosis course the following week. On entering the classroom, the subject showed only slight (and not unusual) anxiety at the beginning of an uneventful hypnosis session. Before the session she announced that she would prefer to have help with her moderate weight problem instead of her smoking. The director of the course agreed to this change of "therapeutic goal," and the demonstration in hypnosis began.

HYPNOTIC PROCEDURE

The subject was given simple commands at the prehypnotic stage (e.g., "Sit here.... Move your chair.... Step out of your shoes...."). Induction was accomplished by Erickson's finger levitation technique (1): "An imaginary string is attached to your finger and is tied to an imaginary balloon which is lifting your finger." The subject's finger rose promptly and was followed by her arm. Deepening the trance was brought on through a slow counting from one to 20, with suggestions that the subject was sinking into a state of total relaxation. Her breathing became slow and deep; the tone of her facial muscles indicated that she had reached a good state of relaxation. Challenges were also successfully met: eyelid catalepsy—"Your eyes are closed, they cannot be opened..."; hand paralysis—"Your hand and arm remain on the chair; you cannot raise them..."; and arm catatonia—"Your upraised arm is tight and stiff.... You cannot bend it...." Finally glove anesthesia with capillary contraction were produced. This allowed the patient to withstand the passage of a number 18-gage intramuscular needle through the skin at the dorsum of the hand without her evidencing pain or withdrawal. Only one drop of blood appeared. The subject was allowed to witness the presence of the long needle before it was withdrawn from the back of her hand. Until this point all suggestions were reversed after each challenge. The patient had reached the stage of light trance, score 11 on the Davis-Husband system (2).

In this relaxed state, the subject was told that she could overcome her excessive eating habits, that at meals her "appetite center" would be numbed, that she would be satiated after the intake of a standard low-calorie fare, and that between-meal-hunger would be stilled. She was also told that after awakening, she would feel alert, rested, optimistic about losing weight, and "perfectly normal." At the count of ten she was dehypnotized. Her eyes opened promptly and, stating that she felt well, she left the room.

REACTION AFTER HYPNOSIS

The subject, as she later described the episode, felt sleepy on returning directly to hospital duty. Although she was given several cups of black coffee by co-workers,

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she experienced difficulty in functioning. She became increasingly anxious as obsessive recall of the hypnotizing doctor's voice filled her thoughts. Fears that she might lose control seized her, and she further worried that the repetitive recollections of the hypnotic sessions were hallucinations.

Co-workers (none of whom was a physician) later described her behavior in subjective terms. A nurse reported: "Oh, she was acting goofy; she was just hypnotized." Considerably more concern was evidenced by her supervisor, who noted "aimless body movement" and an unusual "shifting of gaze." "She looked around the room, not at any subject." Some abulia was present, and the supervisor sensed that she had to make immediate decisions for the subject. The subject was then escorted into a taxicab and told to rest at home the next day instead of reporting to work. After the subject was dispatched to her apartment, the supervisor learned of the hypnosis from another employee and immediately phoned the subject; the latter was awakened and again became anxious after the supervisor extracted a detailed description of the hypnotic session.

Although encouraged to arouse her roommates, the subject returned to bed and slept well until the next morning. She then impulsively decided to go to her parents' home for the weekend—a trip of more than 100 miles one way. At home the anxiety lessened, the obsessional playback of the hypnotic suggestions waned, and she no longer feared she might lose control. Only one unusual event occurred during this time: She accidentally spilled hot syrup, causing a burn on the same hand that had originally been anesthetized under hypnosis. Of course the anesthesia had been removed, and the patient experienced pain following the trauma.

The hypnosis had taken place on a Thursday afternoon. Monday morning the subject returned to work and has remained symptom free since. Her eating habits have responded to the posthypnotic suggestions; she does not "snack" between meals and keeps to a low-calorie diet. She lost 13 pounds in the first seven weeks.

PSYCHIATRIC EXAMINATION

The subject was a 26-year-old paraprofessional who had served with one medical unit since graduating five years previously. She had an excellent work record.

She could not date the origin of her problems with obesity, saying she had been heavy like her mother for as long as she could remember. She had tried various diets and had with great effort lost over 50 pounds, only to regain the weight later. Her eating pattern included a light breakfast, lunch, and supper. Excesses occurred during the evening work shift, when she was continually snacking, and before bed. She noted an increased intake during mildly depressive moods, which were infrequent and did not interfere with routine functions. She had never had any anorexia.

Her medical history was essentially negative. At the time of college graduation she had tension headaches.

She has had many social relationships outside of work, but she claimed she has found it difficult to be herself, especially at parties, where she has felt anxious and self-conscious. She thinks of having children in the future and looks forward to enjoying motherhood; she is less secure about her role as a wife.

A mental status examination revealed a mildly obese young woman who was pleased to be given the opportunity to talk about herself. Although she was slightly anxious at the beginning of the interview and was somewhat guarded, she relaxed later. Candidly, she admitted some concern about her failure to have more intense relationships with the opposite sex. During the interview she showed no signs of depression or any evidence of psychosis. She was bright, very conscientious, and somewhat inhibited.

Two particularly important factors stood out: the subject's wish to lose control and her fear of this. Further inquiry into her fantasies about the hypnotic experience revealed that the subject thought she might say and do things she would not ordinarily do, and that she would not remember any of this afterward. Her knowledge of hypnosis was from a movie, "Divorce American Style," in which a woman was told to be a coffeepot and an exotic dancer. Fearing she would be given similar orders, our subject entered the session certain she could not be hypnotized. Initially the subject "played along" but became quite anxious as well as "excited" when she could not bend her arm as instructed. She then felt she was under the doctor's control. She wondered, "Does the superego change?" Under questioning, she confessed to feeling sexually excited by some fantasies she had while hypnotized but chose not to reveal them.

During the depersonalization episode, she was embarrassed when talking to her supervisor; she feared she would be judged "crazy."

DISCUSSION

We failed to pinpoint factors in the subject's medical history or psychiatric interview that would have forecast her brief episode of depersonalization. Her work record also offered no clue to her short-lived psychopathologic reaction. Only a retrospective analysis of her fantasies about the hypnotic session yielded some understanding of her reaction. A fear of losing control with a possibility of fulfilling some unconscious (sexual?) wishes set off the inappropriate defense mechanism that was clinically described as depersonalization. The aloofness, fatigue, obsessive recall of the hypnotic monologue, and brief withdrawal from work and colleagues served to "protect" the subject from acting out her forbidden (and to us unknown) fantasies.

We have considered the possible threat of weight reduction and the patient's use of obesity as a permanent defense structure. However, the limited psychiatric interview provided insufficient evidence to confirm this hypothesis, and projective testing or extensive psychoanalysis could not be obtained.

CONCLUSIONS

We observed a brief episode of decompensation in an apparently normal subject following hypnosis. The period of depersonalization described here lasted only a few hours and was clearly self-limiting, with a complete return to the premorbid stage. A subsequent inquiry into her fantasies associated with hypnosis revealed expectations of a sexual experience while under the trance. In the posthypnotic phase the forbidden impulses yielded to defense mechanisms producing the state of depersonalization.

Our clinical experience reiterates the principle that hypnosis is a serious medical procedure and requires adequate safeguards (3). We specifically recommend: 1) a follow-up observation of the patient and an opportunity for the patient or his family to contact the hypnotizing physician if needed; 2) an investigation of the patient's expectations of hypnosis, real or fantasied, which is essential to the mandatory pretreatment examination; and 3) an explanation of the true nature of hypnosis, which may serve as an affective prophylaxis to episodes such as the one we have described.

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Usual and Unusual Agranulocytosis During Neuroleptic Therapy

BY J.V. ANANTH, M.D., D.P.M., J.V. VALLES, M.D., AND J.P. WHITELAW, M.D.

Agranulocytosis, an uncommon side effect of phenothiazine treatment, usually occurs within the first three months of such treatment and remits after the substitution of another neuroleptic. The authors report one patient in whom the illness took its usual course and two in whom it did not. Of these two, one patient demonstrated agranulocytosis only after years of phenothiazine therapy and the other showed agranulocytic reactions to various neuroleptics.

THERE ARE many reports of agranulocytosis associated with the use of various phenothiazine derivatives. Both drug dosage and the duration of administration are considered to be important factors in producing this type of agranulocytosis (1). A third factor, individual susceptibility, is also considered to be a significant contributor to its incidence. While agranulocytosis has been estimated to occur in one out of every 10,000 persons treated with phenothiazines (2), leukopenic and granulocytopenic reactions have been more frequent. Pisciotta (3) found transient, moderate, and spontaneously reversible leukopenia in about 2,000 of 6,200 patients receiving phenothiazine therapy. Agranulocytic reactions, however, have been infrequent.

The agranulocytosis usually occurs within the first three months of therapy and often is evident after the first ten days (1). However, agranulocytosis can develop after prolonged phenothiazine administration (4–6). Methods used to prevent the recurrence of blood dyscrasia in the presence of unrelenting psychopathology include changing the incriminated phenothiazine to a congener (usually a piperazine derivative) (7), and substituting one of the other neuroleptic subgroups, i.e., a butyrophenone (8) or a thioxanthene. While these measures are often met with success, sometimes agranulocytosis recurs no matter what antipsychotic drug is used.

In this report three case histories are presented that illustrate the usual and unusual courses of agranulocytosis following the administration of a phenothiazine. The first case report illustrates the common experience with agranulocytosis; the second case illustrates unusual agranulocytosis with subsequent tolerance to a second neuroleptic drug; and the third case demonstrates recurrent agranulocytosis or leukopenia after the administration of three different neuroleptic drugs.

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CASE REPORTS

Case 1. A 59-year-old man with a diagnosis of psychotic de-

pression was admitted to Douglas Hospital in Montreal on July 19, 1971, for treatment of depression and psychomotor retardation. The same day 400 mg. of methotrimeprazine a day and 75 mg. of imipramine a day were prescribed. Since the patient's symptoms improved, the dose of methotrimeprazine was reduced to 200 mg. a day on August 9, 100 mg. a day on August 16, and 50 mg. a day on August 27. The imipramine was discontinued on August 16. On August 23, the patient had a temperature of 101F, which responded promptly to the administration of 500,000 units of penicillin given four times daily for three days. However, his temperature in the morning continued to spike to 99F. By September 3, he was still bedridden, and rales were heard over the base of the right lung. For these reasons methotrimeprazine was discontinued.

On September 7, his white blood cell count (WBC) was 2,135 cells per cu. mm., with 3 percent neutrophiles, 90 percent lymphocytes, and 7 percent monocytes, compared with his predrug WBC of 6,970 on August 19, 1971. Toxic granulation was observed on September 8, when the total WBC was 2,020 cells per cu. mm., with 4 percent neutrophiles, 89 percent lymphocytes, and 7 percent monocytes. The hemoglobin was 10.6 gm./100 ml., the hematocrit was 33 percent, and the sedimentation rate was 29 mm./min. The next day, September 9, the total WBC had risen to 3,349 cells per cu. mm., with 26 percent neutrophiles. From then on the WBC rose steadily and reached the normal range in four days.

Case 2. A 39-year-old woman was admitted to Douglas Hospital in 1946 with a diagnosis of mental deficiency with psychosis. The patient was started on 400 mg. of chlorpromazine a day on February 21, 1955. Over the years this dose was increased to 1,600 mg. a day. Between 1955 and 1967 the patient received reserpine, luminal sodium, prochlorperazine, and perphenazine. On March 5, 1967, she was started on 800 mg. of methotrimeprazine, 6 mg. of trihexyphenidyl, and 100 mg. of luminal sodium daily. This regimen was continued until January 3, 1969, when the patient developed a fever and sore throat, accompanied by a WBC of 800 cells per cu. mm., all of which were lymphocytes. The hematrocrit was 30 percent, with a hemoglobin value of 10 mg./100 mg. The bone marrow was hypocellular in the granular series with normal erythrocyte and megakaryocyte numbers.

Since 1956, her WBC had never fallen below 4,500 cells per cu. mm. The patient was treated with 2 gm. of cloxacillin given intravenously every four hours and 500 mg. of kanamycin given intramuscularly every eight hours for five days. On January 7, 1969, her WBC was 1,700 cells per cu. mm., with 157 juvenile neutrophiles. In two weeks the patient's condition had improved, and she was returned from the medical service to her psychiatric bed. She was kept free of medication until September 22, 1969, when she was started on 10 mg. of thiothixene a day because of aggressive behavior. At this time her WBC was 5,000 cells per cu. mm., with 48 percent neutrophiles. Since her symptoms did not improve; the thiothixene was increased to 60 mg. a day with adequate therapeutic response and without hematological side effects.

Case 3. A 54-year-old woman was admitted to Douglas Hospital on March 10, 1971, for depression, agitation, and persecutory delusions. A diagnosis was made of schizophrenia, paranoid type. Prior to this the patient had been admitted to Jewish General Hospital on December 5, 1970, for similar complaints. She had received 200 mg. of chlorpromazine a day and 125 mg. of trimipramine a day along with electroconvulsive therapy. On December 27, 1970, she developed a persistent fever of 102F along with confusion and weakness. The only abnormal finding noted on physical examination was diminished air entry in the left lung base associated with fine rales. Her WBC of 4,100 cells per cu. mm. on admission dropped to 1,200 cells per cu. mm. by December 31, 1970. Of these 1,200 cells, 59 percent were neutrophiles; 38 percent, lymphocytes; and 3 percent, monocytes. The hemoglobin was 9.5 gm./100 ml. One day after her medication was discontinued her WBC rose to 2,800 cells per cu. mm. By January 6, 1971, it had risen to 8,900 cells per cu. mm. Bone marrow aspirates revealed "recovery stage of agranulocytosis with myeloid arrest." Blood and urine cultures were negative. Chest X rays revealed a "poorly defined left hemi-diaphragm associated with loss of the left costophrenic angle indicating the presence of pleural effusion"; all other investigations were normal. The patient was treated with ampicillin and gentamycin. She was afebrile 48 hours later, and by January 12, 1971, she was fit enough to be discharged to her home. While she was in the medical ward, administration of haloperidol produced a leukopenic reaction necessitating withdrawal of medication.

On admission to Douglas Hospital in March 1971, the patient had a total WBC of 3,150 cells per cu. mm., with 63 percent neutrophiles, 35 percent lymphocytes, and 2 percent eosinophils. Thiothixene was given at a dose of 15 mg. a day and was gradually increased to 30 mg. a day by April 21, 1971. Her blood was monitored twice weekly. By August 4, the WBC had reduced to 2,630 cells per cu. mm., with 60 percent neutrophiles and 36 percent lymphocytes. All medications were consequently withheld. Shortly after the WBC increased to 4,080 cells per cu. mm. Since her psychopathology failed to remit, the patient was given 8 mg. of perphenazine a day, beginning on October 16, 1971, and increasing to 16 mg. a day by October 21. The WBC decreased again to 2,650 cells per cu. mm., with 57 percent neutrophiles, 33 percent lymphocytes, 4 percent eosinophils, and 6 percent monocytes. Immediately after perphenazine was discontinued her WBC increased.

DISCUSSION

It is usual for a mild, reversible agranulocytosis to develop within the first three months of phenothiazine administration. The bone marrow during this period of agranulocytosis appears to be aplastic. The usual full recovery indicates that the marrow stem has been spared by the drug. Because the average life span of healthy erythrocytes is 120 days and because agranulocytosis develops acutely, anemia does not accompany the leukopenia. The first case report provides an example of this typical reaction.

It is unusual for agranulocytosis to manifest itself after years of phenothiazine treatment. In such cases there is always the possibility that the reaction has been associated with viral disease, physical illness, or an increase in the medication dosage. In the second patient the dosage of methotrimeprazine had been the same for about two years prior to the reaction. This indicates that an increase in the dosage was not the etiological factor. Even after several years of treatment, the leukopenia was unassociated with anemia—an indication of the acute onset and the absence of a slower disease process. The patient did not suffer a drug reaction when she was given thiothixene.

Usually changing the phenothiazine or substituting another class of neuroleptic will prevent recurrence of an agranulocytic reaction. In the third patient, neither the

phenothiazine derivative, perphenazine, nor other neuroleptics, thiothixene or haloperidol, were useful in preventing severe leukopenic reactions. This patient may have a less efficient mechanism of DNA synthesis. It has been shown that some chlorpromazine-sensitive patients have a defect in incorporating thymidine phosphate into DNA (9). Thus, there is a strong suggestion that this particular case of agranulocytosis was caused by the administration of a phenothiazine to a susceptible patient.

These three case reports show not only that agranulocytosis may occur within the first three months of therapy, but also that severe leukopenic reactions may suddenly occur even after years of treatment with the same phenothiazine. Furthermore, some patients appear to be susceptible to acquiring the agranulocytic reaction from all of the neuroleptic preparations. Therefore, caution must be exercised when substituting an antipsychotic medication to prevent agranulocytosis that has developed through the use of another drug.

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The One-Week Prevalence of Symptoms in Neurotic Patients and Normals

BY ROBERT KELLNER, M.D., PH.D., AND BRIAN F. SHEFFIELD

A questionnaire concerning the number of symptoms experienced during one week was administered to 100 neurotic patients and 100 normal subjects, first in England and then in New Mexico. The rank order of frequency of symptoms was similar on both sides of the Atlantic, but neurotics and normals had different rank orders. Both groups reported a high prevalence of symptoms, with neurotics reporting a significantly greater number of almost all symptoms.

SYMPTOMS REPORTED as having occurred during a short time can be important data in research in psychiatry, for example, in rating distress or in evaluating the side effects of drugs. The purpose of this study was to examine the self-reported occurrence and distribution of symptoms in normal subjects over a one-week period and to compare these findings with the self-reported occurrence of the same symptoms in neurotic patients. The study was carried out in England and repeated in New Mexico.

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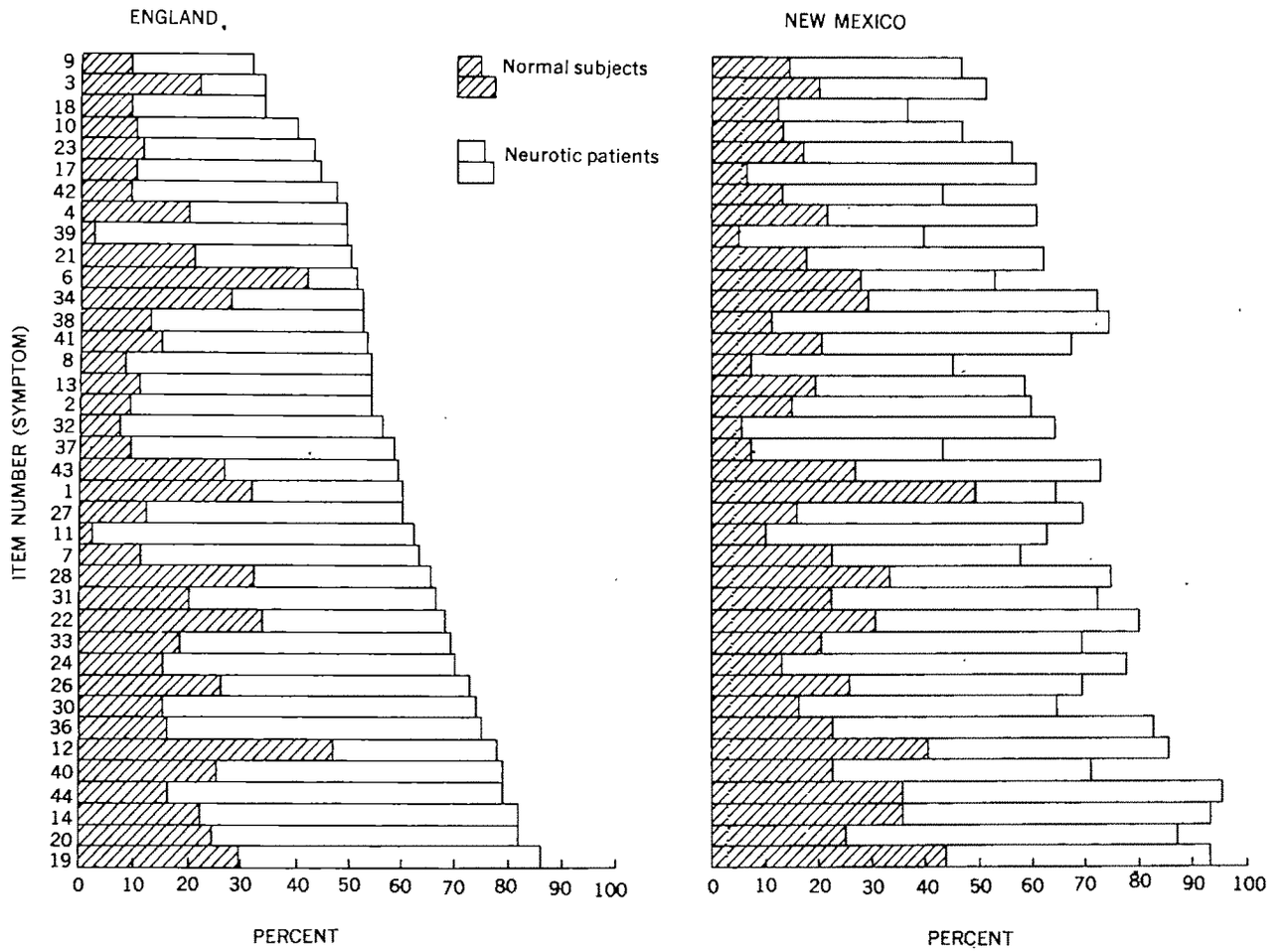
This work was supported in part by grants from the Mental Health Research Fund, England, and the Liverpool Regional Hospital Board.

POPULATION AND METHOD

In the first study the normal group consisted of employees of a pharmaceutical firm and of a public health department. A letter was sent to unselected employees, asking them to participate anonymously in a study. In the letter the purpose of the study was briefly explained as a preliminary study of the effects of treatment. Of the 100 normal subjects selected, 58 were men and 42 were women. Their ages ranged from 17 to 60 years, with a mean of 37 years. There were also 100 patients chosen to participate in the study. Only those who had been diagnosed by the examining psychiatrist as neurotic were included. Of these, 52 were consecutive new outpatients and the remainder were consecutive inpatients and day patients at two hospitals in Liverpool, England. Their ages ranged from 18 to 60 years, with a mean of 33.8 years. There were 59 women and 41 men. The procedure used and the tests administered were the same for patients and normals.

The second study was carried out in Albuquerque, N. Mex. The same method and procedures used in the first study were adopted for this one. The normal group consisted of employees of a university department and members of a social club. There were 100 subjects—76 men and 34 women. Their ages ranged from 16 to 65 years, with a mean of 30 years. The patient group consisted of 100 consecutive outpatients, of whom 60 were

FIGURE 1
*One-Week Prevalence of Symptoms**



*See appendix 1 for a list of the symptoms. The symptoms are ranked according to the frequency of occurrence in the first group of neurotic patients.

women and 40 were men. Their ages ranged from 17 to 58 years, with a mean of 29 years.

In both studies the patient groups contained a larger proportion of semiskilled and unskilled workers than the normal groups, while the normal groups contained a larger proportion of persons from professional and managerial occupations.

All subjects were administered the pencil-and-paper form of the Symptom Rating Test (1). This test contains self-rating scales and a checklist of 15 somatic and 24 emotional symptoms (see appendix 1). They were also given a brief questionnaire concerning current illnesses and treatments. Each page of the checklist began with the question: "How have you felt *during the past week*?" This was followed by questions such as, "Have you had headaches or head pains?" "Have you felt dizzy or faint?" The responses available were "yes" and "no." Only the results obtained from the checklist will be reported here. The chi-square test was used to test for differences between patients and normal subjects. Differences at or below the conventional level of five percent were regarded as significant.

RESULTS

In figure 1 the symptoms are ranked according to their frequency of occurrence in neurotics in the first study. In both studies all symptoms occurred more frequently in neurotic patients than in normals. In the first study this difference was significant for 36 symptoms ($p < .001$). For two symptoms ("stomach pains" and "muscle pains, aches, and rheumatism") the difference failed to reach a significant level. In the second study all symptoms occurred significantly more frequently in patients than in normals (one symptom at the $p < .05$ level and the rest at the $p < .001$ level).

The American groups tended to show a higher one-week prevalence of symptoms than the corresponding English groups; no tests of statistical significance were carried out because the groups may not have been representative, and any differences in results may have been caused in part by the method of selecting the subjects.

The most common symptoms in neurotic patients were overt emotional ones. In the first study these symptoms were "worry," 86 percent; "tense," 82 percent; and "unhappy, depressed," 82 percent. In the second study the most common symptoms were "nervous," 95 percent; "worry," 93 percent; and "tense," 93 percent. In normal subjects the most common symptoms were somatic ones, the three most common in the first study being "tired," 47 percent; "muscle pains, aches," 42 percent; and "irritable," 34 percent and in the second study, "headaches," 49 percent; "worry," 43 percent; and "tired," 41 percent. Eighty-nine percent of the normals in the first study and 93 percent in the second study reported at least one symptom during the week of the study. Thus the experience of symptoms is apparently compatible with health.

Analysis of the data by age, sex, and social class showed that differences between the patients and the corresponding normal subjects had not materially affected the results.

In the first study one normal subject suffered from chronic bronchitis, one had substitution therapy for myxedema, and one had a minor respiratory infection during the week of the study. Five subjects were taking tranquilizers and eight were taking hypnotics at night. In the patient group, five had physical illnesses: One had osteoarthritis of the hip, one had neurodermatitis, one had chronic nephritis, and two had chronic bronchitis.

In the second study one normal subject had rheumatoid arthritis and one had peptic ulcers. Six of these normal subjects were taking tranquilizers, and nine others were taking hypnotics at night. Among the patients one each had spondylolisthesis, Hodgkin's disease, bronchial asthma, and cirrhosis of the liver. Most of the subjects in the patient groups were taking psychotropic medications.

In both normal groups, subjects who reported physical illnesses reported a higher mean number of somatic symptoms than the rest of the group. This was not found in the patient groups.

DISCUSSION

The high prevalence of symptoms and the rank order were similar on both sides of the Atlantic for normals and for patients. There were expected differences between patients and normals. The normal groups had a high prevalence of symptoms over one week, and a fairly large proportion reported symptoms suggestive of psychiatric ill health (for example, 15 percent and 12 percent reported "feeling unworthy or a failure," 13 percent and 9 percent reported that they were worried that they might have a serious illness, and 7 percent and 6 percent reported feeling that there was "no hope"). This is in accord with the findings in some epidemiological surveys in which a large proportion of subjects were found to be distressed and reported symptoms (2–5).

The proportion of normal subjects who reported overt emotional symptoms during one week was larger than the proportion of people who see a general practitioner for these symptoms during one year (6). It appears that only a small proportion of subjects who experience emotional symptoms will seek the help of a physician.

The differences in ranking between patients and normals were unexpected in that in both studies the most common symptoms in normals tended to be somatic, whereas in patients they tended to be overtly emotional.

A fairly large proportion of patients and normals in both studies reported symptoms that could easily be mistaken for medication side effects (for example, symptoms of feeling dizzy or faint, feeling nauseated or sick, heart beating strongly or quickly, and poor appetite). Most of the neurotic patients in both studies were taking medication at the time this work was done, but a large proportion of normals who reported these somatic symptoms were not taking any medication, nor did they report physical illness during the week of the study.

These findings suggest that the frequently reported placebo side effects (i.e., symptoms that patients report when given placebo) may largely be commonly occurring symptoms and not symptoms due to the suggestive effect of the placebo. The findings further suggest that unless a crossover placebo period is used as a baseline, an observer could get a false impression of the side effects of a new medication.

The two American groups showed a tendency to report more symptoms than the English groups. No conclusions can be drawn from these findings since these differences may have been due to biases in selection. Against this trend a few symptoms were reported more frequently in both English groups, i.e., heart symptoms (item 8), lacking self-confidence (item 40), and "feeling inferior to others" (item 37). These results might represent cultural differences but require replication.

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APPENDIX 1

List of Symptoms (Items)

1. Headache, head pains
2. Dizzy or faint
3. Stomach pains
4. Sick, nauseated
6. Muscle pains, aches, rheumatism
7. Parts of body felt weak
8. Palpitations, pounding of heart
9. Chest pains

10. Breathing difficulties, not enough air
11. Trembling, shaking
12. Tired, lack of energy
13. Pressure, tightness
14. Tense, wound up
17. Poor appetite
18. Numb, tingling sensations
19. Worry
20. Unhappy, depressed
21. Memory poor
22. Irritable
23. People looked down, thought badly of you
24. Loss of interest
26. Couldn't concentrate
27. Unworthy, failure
28. Difficulty in sleeping
30. Scared, frightened
31. Trouble thinking clearly, making up your mind
32. No hope
33. Thoughts you could not push out of your mind
34. Angry, lost temper
36. Restless or jumpy
37. Feeling inferior to others
38. Afraid you may do something you would regret
39. Attacks of panic
40. Lacked self-confidence
41. Felt guilty
42. Worried that you may have a serious illness
43. Upset by what other people said or did
44. Nervous

Goal-Attainment Scaling as a Method for Evaluating Mental Health Programs

BY DAVID W. CLINE, M.D., DAVID L. ROUZER, PH.D., AND DAVID BRANSFORD

Goal-attainment scaling, a method for evaluating individual or group treatment programs, involves setting up individualized treatment goals and scoring the attainment of goals from the most successful outcome (+2) to the least successful (-2). Having the therapist and patient construct the scale helps to differentiate problems, structure therapy, and clarify outcomes. Over-optimism about the benefits of therapy may cause problems with score validity; measures for external validation are suggested.

A NEW METHOD for evaluating comprehensive mental health programs was reported in 1968 by Kiresuk and Sherman (1). The patients were randomly assigned to treatment modes and an individualized goal (or set of goals) was specified for each patient, the degrees of attainment or nonattainment of this goal being assigned a value on a numerical scale ranging from +2 to 0 to -2 and expressed as a standardized T score (with a mean of 50 and a standard deviation of 10). This method permits objective comparison of treatment modes within a total program.

More specifically, the procedure works as follows: After an initial diagnostic evaluation of a patient by an evaluating team, the goal selector (or goal selection committee) decides upon a realistic set of mental health goals for the patient and specifies for each goal a scale composed of a graded series of likely treatment outcomes, ranging from most to least favorable. At least two but preferably three points on each scale must have sufficiently precise and objective descriptions to enable an unfamiliar observer to determine whether the patient lies above or below that point. These points are then assigned numerical values: +2 for the most favorable outcome, -2 for the least favorable outcome, and zero for the outcome considered most likely.

The goal-attainment scale thus represents a transformation from a subjective judgment of treatment outcome to a random variable, with a mean of zero and a variance of one. The goal selector may also specify a set of weights for the goals, reflecting his appraisal of the relative value of each goal as an indicator of successful treatment. (For example, see table 1, where alleviation of depression was weighted 80 and improved peer relationships, 60.) The defined points may be directly or indirectly related to the mental health goal. For example (see table 1), a patient may have a mental health goal of "less dependency on mother," with the most unfavorable outcome thought likely (-2) being "Does not make even minor decisions without mother's advice," the expected level of success (0) being "Makes many of own decisions without feeling rejected by mother," and the best anticipated treatment

Presented in part at a panel discussion at the 124th annual meeting of the American Psychiatric Association, Washington, D.C., May 3–7, 1971.

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This work was supported in part by the Minnesota Medical Foundation and by Public Health Service grant MH-05921 from the National Institute of Mental Health.

success (+2) being "Consults with mother only on major decisions that affect her."

After treatment (including drug treatment, individual therapy, group therapy, and day hospital care) for a fixed interval (six months to one year), a follow-up worker contacts the patient and reviews with him his progress toward achieving the goal specified before treatment, thus arriving at goal-attainment scores that may be viewed as success-failure scores. The final step is computation of a composite goal-attainment score, which transforms the several goal-attainment scores into a single standard score with a mean of 50 and a standard deviation of 10. From this composite score one can determine whether further services are required or whether treatment has been successful.

This goal-attainment method may also be used to appraise an entire mental health program. Kiresuk and Sherman have begun such a research project under the auspices of the National Institute of Mental Health. Our own two-year experience with goal-attainment scaling as an educational tool, as a therapeutic tool, and as an indicator of success or failure with patients is reported here.

APPLICATIONS

Education of Therapist

The Psychological Treatment Unit of the Department of Psychiatry, University of Minnesota Medical School, began to use goal-attainment scaling early in 1969 (2). Each patient admitted to the unit, together with his therapist, constructed a goal-attainment scale. The use of therapist and patient to construct the scale is a departure from the procedure outlined by Kiresuk, who suggested that an independent goal selector design the goals without either the patient's or the therapist's knowledge.

Our method, although contaminating a clean research design, produced educational and therapeutic benefits. In our setting, where medical students, residents, psychology interns, and other mental health personnel are trained, there is often the problem of defining psychiatric patients' problems in such a way that they are meaningful for the student. Medical students in particular find it difficult to comprehend and to differentiate psychiatric problem areas. Goal-attainment scaling provides for these students a structure within which they can understand, appraise, and work in a therapeutic relationship with the patient.

For example, the patient whose attainment scaling appears in table 1 was obviously neurotically depressed and had dependency problems. Other than the diagnostic significance of this observation, the therapist was unable to comprehend various problem areas that manifested themselves within this diagnostic capsule. Goal-attainment scaling, which differentiated the problem areas (i.e., mother relationship, peer relationship, sex and dating, decision making, and the construction of a continuum of possibilities for change), clearly structured the psychiatric problem. Goal scaling was thus an educational tool by which the therapist could understand and then meaningfully work with the patient. It gave the therapist an organized sense of the specific problem areas and further pointed out the possibilities for therapeutic action.

The information on treatment outcome provided from follow-up, which in our setting ranged from four months to one year and was completed by an independent rater, has additional educational benefits: The beginning student therapist, as well as the permanent staff members, get a relatively clear picture of treatment outcome. The patient whose goals are described in table 1 showed a T score of 55 on follow-up. Since a score of 50 represents the expected level of treatment success, a score of 55 means that this patient had a slightly better overall outcome than expected. However, the rating in the area of dating and sex was at the less-than-expected level of treatment success; this area is clearly one where further help needs to be rendered. This type of feedback provides some closure to the treatment endeavor and, more importantly, a sense of process and temporal relationship. The patient described here came for treatment with a history of experiences that resulted in the difficulties depicted on his goal-attainment scale. During his experience with the treatment unit, he made some changes that, at one-year follow-up, showed improvement in many of the areas of previous difficulty, even though more work remained to be done in others. This patient's status is an evolving process; we intervene and follow his course—structuring, organizing, and quantifying by the goal-scaling technique.

Therapeutic Aspects

When the patient participates in defining problem areas and in documenting the continuum of possibilities for change, he also derives therapeutic benefit. Goal-attainment scaling helps him sort out problem areas in specific terms and, furthermore, is a basis on which a therapeutic contract can be made. The patient previously mentioned came for treatment realizing only that he was depressed. Further exploration into that problem revealed to him his stifling dependency relationships. The goal-attainment scale he worked out with the therapist provided a structured framework within which he could commit himself to a treatment contract. With specific goals in mind he set out, with the therapist's help, to modify his behavior. When the primary tasks of treatment are clearly established, therapy is less likely to become directionless and meaningless: Good therapy has the quality of goal directedness, and goal-attainment scaling helps make this manifest.

Assessing Treatment Programs

As Kiresuk and Sherman have stated (1), goal-attainment scaling may be used in any context where quantifying progress would enhance efficiency and productivity. Thus, it is possible to use the Kiresuk procedure to assess the adequacy of a treatment program in much the same way individual treatment is assessed. This can be done very simply by randomly selecting N individuals

TABLE 1

Kiresuk Goal-Attainment Scale

Outcome Value	Goals (Goal Weights)				
	Alleviation of Depression (80)	Less Dependency on Mother (80)	Improved Peer Relationships (60)	Increased Dating and/or Successful Sexual Relations (70)	Vocational Success (50)
−2: Most unfavorable treatment outcome	Suicidal thoughts and gestures, feels chronically depressed.	Does not make even minor decisions without mother's advice.	Does anything for anyone to buy friendship.	No dating or one date a month.	No employment.
−1: Less than expected level of success with treatment			Says no to friends' selfish demands.		Odd jobs periodically.
0: Expected level of success with treatment	Occasionally feels depressed and has passing suicidal thoughts but no gestures.	Makes many of own decisions without feeling rejected by mother.		Calls girls for dates and has a date, with petting, once a week.	Steady work as blue-collar worker.
+1: Greater than expected level of success with treatment			Concerned with needs of others and has respect from peer group.		
+2: Best anticipated treatment success	No feelings of depression; no suicidal thoughts.	Consults with mother only on decisions that affect her.		Marriage with satisfactory sexual relationship.	Skilled laborer.

from a patient population and finding the mean goal-attainment score. If this score were significantly below expectancy, the thoughtful investigator would entertain the notion that this therapy program needs revamping.

Of course it may be argued that patient improvement is only one of several aspects salient to program evaluation. To aid in evaluating a program, one might wish to specify other goal dimensions, each having its own concrete reference so that an objective observer could rate degree of attainment, cost of care per patient, staff morale, the consistency with which staff members treat patients, length of hospital stay, relapse rates, and whatever other possibilities one could think of for rating a program. We have not yet begun to evaluate our program at this more complex level.

RETROSPECTIVE STUDY

In order to gain experience with goal-attainment scaling and to evaluate how well we were doing with patients in our care, we designed a retrospective study using this scaling technique. Two research associates reviewed evaluation intake data (psychiatric, social work, nursing staff, and psychological testing) for 39 patients and then constructed goal-attainment scales for each of these patients. Without knowing the patients or treatment modalities used, these same researchers contacted each of the subjects for follow-up evaluation and then calculated the goal-attainment scale. The mean T score for this group was 39, with a standard deviation of 10, which indicated that these patients were at the less-than-expected level of success with treatment (−1). This result implies either that treatment had been relatively ineffective, or that the goal-attainment scalers had been overly optimistic in assigning the expected level of treatment success. Review of the goal-attainment scales from this sample showed that over-optimism about results was the more influential cause here, and, in turn, suggested the need for greater emphasis on training, diagnosis, course of illness, and expectancy for treatment.

As our retrospective study indicates, the Kiresuk goal-attainment scaling procedure does not automatically guarantee appropriate designation of expectancy levels. Another aspect of the procedure that leaves room for error is the selection of goals, which is heavily dependent upon the therapist's skill and experience in assessing the sociopsychological factors underlying disturbed behavior. Thus, it is possible that the changes indicated by an individual's goal-attainment score are trivial or irrelevant to his total adjustment. If this is the case, there will be a preponderance of high scores but no significant change in rates of remission.

It is therefore desirable to check the goal-attainment scale against some external criterion of adjustment. The Minnesota Multiphasic Personality Inventory (MMPI) is a well-known, objective personality questionnaire with known validity as an index of adjustment. Our initial ex-

plorations of the relationship between changes on the MMPI from admission to discharge and on the goal-attainment scale suggest the possibility that sex and personality type influence the correlations, but our sample is too small to report detailed findings at this point; we mention them only to suggest the need for further research along these lines.

CONCLUSIONS

Goal-attainment scaling is valuable in the psychiatric education of the therapist, as a therapeutic tool, and as a means of assessing treatment outcomes. The successful use of this scale implies substantial knowledge of the patient's problems and realistic expectancy levels for outcome. We feel that the reliability of this procedure can be enhanced if follow-up is repeated over an extended period of time, since mental health, like health in general, is usually a fluctuating state. This procedure has potential merit in evaluating other programs, such as the training of students, interns, or residents.

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LETTERS TO THE EDITOR

The Role of Psychiatry in War and Poverty

SIR: In the section on social issues of the "Report of the Trustees' Policy Meeting," March 1971 (September 1971 issue), the statement is made that all five groups comprising the Plenary Assembly "were unanimous in endorsing the resolution passed by the Assembly of District Branches. . . ." That resolution included a statement that "local, national, and international political, social, and economic policies may produce psychological forces which can affect mental health and illness and which can reduce personal dignity, destroy life, and increase human pain and disability. . . ." In spite of this unanimous endorsement the report subsequently states, as the sense of the plenary discussion, that "none of the issues mentioned" (i.e., poverty, children, youth, social planning, violence, etc.) "were viewed as irrelevant *other than the war issue,* and not even that would be irrelevant *if some scientific evidence could be mustered to demonstrate its relationship to psychiatry*" (italics ours). A statement is also made (not necessarily as a position of the Plenary Assembly) that war and poverty are issues "in which psychiatry *may* have a role" (italics ours).

To state or imply that the relationship of war or poverty to mental health and illness is still scientifically in doubt or that psychiatry *may* have a role in relation to these is indefensible at this point in psychiatric awareness. Such conclusions can only represent a reluctance to take stands on politically, but not psychiatrically, controversial issues and as such constitute a failure of social responsibility on the part of participants in the plenary session.

This conviction, as it relates to war, has received support from the APA Board of Trustees itself in a resolution of May 6, 1971 (July 1971 issue). It reads:

> BE IT RESOLVED:
>
> That the Board of Trustees of the APA wishes to add its voice to that of the great masses of the American people who have so firmly expressed their agony concerning the war in Southeast Asia. Also, as psychiatrists we have specialized deep concerns about its grave effects on morale and on the rise of alienation, dehumanization, and divisiveness among the American people.
>
> THEREFORE:
>
> The Board hereby expresses its conviction that the prompt halt to the hostilities in Southeast Asia and the prompt withdrawal of American forces will render it possible to reorder our national priorities to build a mentally healthier nation.

We the undersigned affirm our conviction that issues of war and poverty in our time are two of the most profoundly important social issues with which psychiatry is confronted. Organized psychiatry has both strong moral responsibilities and scientific bases for position statements about these issues.

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"Diagnosing" Political Candidates

SIR: Although I am substantially in favor of the strong advocacy of alternatives to war in settling disputes between nations, I am filled with disgust by the sanctimonious smugness of a number of members of our profession who use business and scientific sessions to pontificate on the evils of warfare in Southeast Asia.

I consider these pronouncements to be in bad taste for several reasons.

First, the statements are so provocative that in my opinion they should be answered, since they are often sweeping generalizations with only hints of scientific validity. I did not take the floor at the forum following the 1972 annual business meeting because I considered it improper to harangue the majority on what I feel is essentially an issue that should be handled politically by individual members of the organization.

Second, the statements are unequivocally biased. No mention is ever made in these statements of the aggressive role of the Viet Cong or the North Vietnamese. They are always addressed more or less specifically to Mr. Richard M. Nixon, and his name is bandied about and cussed and discussed rather freely. The purpose of these statements, which unilaterally condemn the actions of our government, should be obvious, and I cannot comprehend an organization of responsible scientists accepting such faulty logic.

Third, though the gentlemen and ladies making these statements do so in profound, solemn tones, these same voices become angry, strident, cutting, vicious, nasty, and even virtually obscene whenever their rationale is questioned.

If this is not evidence of defense of an irrational position, then what in heaven is? Those preaching nonviolence are among the rudest, coarsest people I have seen in some time if they do not get their way.

One such gentleman under the guise of "clinical discussion" gave a capsular diagnosis of Mr. Nixon's personality. Doing this is preposterous and absurd besides being in very poor taste. This man was not Mr. Nixon's psychiatrist. As far as I know he had never examined him. This is tantamount to my saying, "Mr. McGovern has a reaction formation against even normal aggressiveness because otherwise he would release anal-sadistic feelings and impulses and commit not war, but matricide." Of course I do not have any idea what is right or wrong with Mr. McGovern in a psychiatric sense. These comments were almost in the nature of the situation at *Fact Magazine* a few years ago when psychiatrists were asked to "diagnose" Barry Goldwater. These same individuals who so glibly "diagnose" political figures they do not agree with strongly condemn the idea of giving psychiatric examinations to rabble-rousers, radicals, rioters,

and general malcontents who call this "political imprisonment." What a contradiction in ideology and ethics!

I am sorry to have had to write this letter. Perhaps I should have expressed my views in the open forum, but then, correspondence may be a more effective way of opening the whole area for discussion among the membership. A vote return of 63 percent by the general membership is not very healthy, particularly when two elections were so close in tally.

I am a concerned psychiatrist, not Concerned. I fear the inroads of social-liberalism and the consequences it may have for a psychiatry based not on logic, scientific reason, and common sense but rather on sociopolitical ideology.

I wonder how everyone else feels.

VIRGIL M. COX, JR., M.D.
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Mental Health of Political Candidates: Notes on Abraham Lincoln

SIR: In light of recent discussions concerning the health of candidates for political office, the following notes about Abraham Lincoln and his family are relevant.

Lincoln's mother was born out of wedlock. His maternal grandmother, Lucy Hanks, was investigated by a grand jury for immoral tendencies—as "too free and easy, . . . too wild in her ways." She later married and quieted down (1). In his late teens or early 20s, Lincoln himself went through a wild period, engaged in fights, and wrote a long-winded and insulting poem. He was pointedly not invited to a family wedding because of his unpredictable behavior.

When Lincoln was 29, following Ann Rutledge's death it was "rumored his reason was in danger." He had "fits of mental depression, . . . wandered up and down the river and into the woods, woefully distracted, . . . filled with indescribable grief." His friends watched him and, fearing suicide, finally sent him to another town where he remained for some weeks and was gradually brought back to his reason. From then on, however, his spells of melancholy became more intense. He wrote to a Dr. Drake in Cincinnati, describing his mental condition, but Drake would not "prescribe . . . without a personal interview." From about ages 29–32, Lincoln did not dare carry a pocket knife when alone (2).

When Lincoln was 31 (January 1841), he did not show up for his scheduled wedding to Mary Todd. Joshua Speed and his other friends "watched him closely day and night," and kept knives and razors out of his reach. On January 19, 1841, the Illinois legislature was informed of Lincoln's inability to attend its sessions. On January 23, Lincoln wrote: "I am now the most miserable man living. . . . I awfully forbode I shall not be better." He wrote lines on "suicide" to the *Sangamon Journal*, which were later cut out of the paper. He was sent to visit Speed's mother in Kentucky, and by autumn 1841, he had apparently recovered, writing to Speed: "I have been quite clear of hypo since you left." He resumed his legislative duties and married Mary Todd. Herndon and Weik reported in his biography that Lincoln's melancholy was "necessarily hereditary, . . . ingrained, . . . could not be reduced to rule or the cause arrayed." It was "part of his nature and could no more be shaken off than he could part with his brain."

Certainly Lincoln had severe affective disorder, perhaps of the bipolar type. He would probably have received antidepressants or electroconvulsive treatments if such therapy had been available then. Since he is generally acknowledged to have been our greatest President, it would seem that his prior disorder did not disqualify him for the office. Had he suffered from it in severe form during his term of office, he would, of course, have temporarily been unable to function. In 1972, however, he could have been treated promptly.

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A Brief Comment on Human Sexuality

SIR: As an editor myself (*Archives of Sexual Behavior: An Interdisciplinary Research Journal*), I am reluctant to write a letter to the editor. It is time-consuming to read them, let alone to write them. However, a paper we currently have in press contradicts Daniel Offer's editorial comment ("Human Sexuality," April 1972 issue): "Findings from recent studies . . . have revealed little change in sexual behavior during the past two decades."

Schmidt and Sigusch (1), in Hamburg, have found:

> The age at first masturbation . . . for girls of high educational level . . . dropped markedly during the last decade. . . . The age at first coitus decreased markedly. . . . Reduced to a simple formula, we can say that the 16 and 17 year olds of today behave like the 19 and 20 year old of 10 years ago.

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Psychiatry and Neurology

SIR: In criticism of Dr. David E. Raskin's choice of the "marriage" metaphor describing the relationship between psychiatry and neurology (Letters to the Editor, May 1972 issue), I would substitute another: Neurology is psychiatry's "anchor" to scientific medicine.

Psychiatry is particularly handicapped by the fact that any transitive act by a physician will relieve basic psychiatric emotion and anxiety and produce a satisfied, if not improved, patient. Drugs, nude therapy, social science, abortion, anoxia, and psychology—all reduce anxiety (has it been noted at NIMH or elsewhere that no agent generates that affect?), the result being pressure upon the psychiatrist to add to his therapy that which appears warmest and brightest from his philosophical horizons. With a covey of satisfied patients, it is human for the physician to overlook that such therapies breed addictions to drugs, to social action, or to the physician. The medical progress of these therapies is, at best, sidewise.

Neurology, the medical science of determinative anatomy and physiology, is our precious link to scientific medicine, which bids us to attend the healthy person with medical complaints but to commit no therapeutic intervention in the absence of objective and demonstrable disease.

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Dumping of Patients: Funding and Statistics a Problem

SIR: The footnote giving the position titles of the authors of "The Hospital 'Dumping Syndrome': Causes and Treatment" (May 1972 issue) is an important factor in the success of their policy change that reduced dumping of patients. Drs. Wilder, Karasu, and Kligler are all members of the faculty of Albert Einstein College of Medicine, Bronx, N.Y. Dr. Wilder also serves in the Department of Psychiatry of the Bronx Municipal Hospital Center. The Director of Bronx State Hospital, Dr. Israel Zwerling, is also head of the Department of Psychiatry at Albert Einstein College of Medicine. All three institutions—Bronx Municipal Hospital Center, Bronx State Hospital, and Albert Einstein College of Medicine—are part of the same teaching complex. It seems to me that these administrative factors played an important part in effectuating an accommodation between the two hospitals in reducing the practice of dumping patients. Certainly Dr. Wilder and associates are to be complimented for recognizing the problem and for doing something about it in their community.

However, financial considerations cannot be overlooked as a cause for the "dumping syndrome." When state mental hygiene budgets are drastically cut and the length of stay in state hospitals is limited to 90 days, dumping of patients from the state hospital into the community and its agencies is a direct result. This dumping situation becomes further aggravated when funds are not available for adequate aftercare services for those patients who have been prematurely discharged into the community.

While Dr. Wilder and associates have been able to reduce dumping between a municipal hospital and a state hospital, the same results might not be so readily achieved were the municipal hospital a voluntary institution and without the joint academic affiliations. Dumping of patients from one institution to another arises when funding for services is inadequate and when patient turnover and numbers served become overriding considerations in the administration of mental health services.

I am the executive director of Altro Health and Rehabilitation Services, Inc., which operates Altro Work Shops, Inc., a rehabilitation and vocational training center located about two miles from both the Bronx Municipal Hospital Center and Bronx State Hospital. Altro Work Shops, Inc., as a voluntary agency in the community, maintains close cooperative relationships with the rehabilitation programs at the Sound View-Throgs Neck Mental Health Center and at Bronx State Hospital. Both institutions refer patients to Altro Work Shops for vocational rehabilitation. As a result of the close tie lines and cooperative relationships that have developed over the years with these mental health institutions, there have been few instances of dumping patients into Altro's community rehabilitation facility. However, where such relationships have not been developed, dumping will result for the right reasons—i.e., because the professional staffs at the state hospitals are concerned about their patients and see the existing community resources as a place where the patient will receive at least "holding" aftercare services.

Cooperative relationships between state, municipal, and voluntary mental health services will, of course, always assist in alleviating and in reducing the damage done to patients by shortsighted legislators, budget makers, and bureaucrats; but even the best and firmest of such arrangements will require adequate funding in order that the focus be placed upon patient care and service rather than upon cost benefits and statistics of patient turnover.

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New York, N.Y.

Request for Writers

SIR: I am editing a book on the role of faith or religion in healing from a physician's standpoint. Those interested in writing for this book please send for details to: Claude A. Frazier, M.D., 4-C Doctors Park, Asheville, N.C. 28801.

CLAUDE A. FRAZIER, M.D.
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BOOK REVIEWS

Helping People: Karen Horney's Psychoanalytic Approach, *by Harold Kelman, M.D. New York, Science House, 1971, 614 pp., $18.50.*

This is not a biography of the life and thought of Karen Horney in the usual sense. Dr. Kelman takes a much more creative approach. He reveals what he considers to be the essence of Horney's theories and her style of treatment by presenting much clinical and theoretical material based on his own 30 years of experience as a psychoanalyst. Considerable space is devoted to the process of training student analysts. All this is done in the spirit of Horney.

Interwoven with the case material is much discussion of Horney's theory of personality as well as other theories that influenced her.

Dr. Kelman describes himself as a holistically oriented analyst, with emphasis on therapy as an *experience* involving patient and therapist. He quotes Freida Fromm-Reichmann as having said, "A patient wants an experience, not an explanation." Both Fromm-Reichmann and Horney felt that process and current experience are more important than content and rigid technique. Rigid theories are only the loosest kinds of guides. The therapist must be free to be innovative. Theory must be expressive of the time, place, and person of the patient. The images Horney used included, where appropriate, the values from a variety of different orientations, from the mind of the East, from the mind of the West—Freudian, post- and neo-, phenomenological, existential, and Oriental.

Along with great flexibility, Kelman stresses the need for regularity, continuity, and consistency in the timetable, although the schedule of frequency and duration differs markedly for different patients and at different times in the process of therapy. Kelman underlines the importance of dreams by devoting nearly 100 pages to the subject.

Far more than most books, Kelman's conveys a great deal of the "feel" of what goes on in analysis. Along with this, he discusses many details of technique, from note taking to subtle maneuvers of interpretation. Reading the book is a moving experience.

Masserman recommends it as imperative reading for those who wish to broaden and humanize their orientation and to improve their clinical skill.

This volume does not present a summary of Horney's theories and treatment. It could have been more helpful if it had presented, in outline form, the essence of Horney's contribution and theory. (This could be included in a second edition.) It is not a critical study of Horney.

Horney's contribution started with emphasis on social factors, as opposed to Freud's biological and instinctive emphasis. She began with basic anxiety, not the castration complex as with Freud and Melanie Klein. Basic anxiety is the result of disturbed security of the child in relation to his parents and, later, to society. Basic anxiety is related to basic hostility. The methods developed to cope with feelings of insecurity and isolation can find expression in three broad pathways or areas. Moving toward people is the need to love; moving away is the need for independence; and moving against people is the need for power. Neurosis develops when one of these aspects develops one-sidedly. When there is love, warmth, security, and respect such difficulties are avoidable. Conflict is thus not instinctive and inevitable but the result of social conditioning.

In contrast to the biological and mechanical emphasis of Freud, Horney started with the need for security as opposed to the instincts of sex and aggression. The various strategies coping with helplessness and isolation are drives or needs. There are neurotic and irrational needs. From the interplay of needs, conflicts develop. Vicious circles are set up. For example, the need to be independent aggravates the need to be loved. The idealized image is created in which contradictory trends disappear—but actually are only repressed. Therapy is a disillusioning process in helping the real self (as opposed to the idealized or fictionalized self) become more developed. A central inner force is the source of a free healthy development of personality potential. There is a struggle between the constructive forces of the real self and the obstructive forces of the pride system, between healthy growth and the neurotic drive, to prove the fictionalized perfection of the idealized self. Thus Freud is biological and pessimistic, whereas Horney is cultural and optimistic.

Femininity was determined by Freud and Helen Deutsch only secondarily—a girl child's early sexual development is parallel to that of the boy. Phallus envy is the central influence in the development of the female castration complex. Horney held, on the contrary, that the earliest phase of the girl child's attachment to the father is patterned after the mother. According to Horney, the wish for a child is thus a primary feminine attitude, whereas according to Freud, the wish for the phallus is primary and only secondarily is there a turn to femininity.

An interesting account of medicine's rather traditional, dehumanized attitude toward terminal patients is contained in a quotation from Kübler-Ross's book, *On Death and Dying* (1, p. 444). Dying is preceded by a kairos experience in which the patient is understood and the possibility of dying with dignity is returned to him. There is a "caring concern of a good friend, a wise spiritual counselor, or a Hippocratic physician who humanly and realistically supports [the patient's] hope [that a cure will be found]."

Kelman's *Helping People* is a monumental scholarly, optimistic, helpful, humanistic study. Indefatigable, unyielding travail and a search for health and wholeness has been the journey of psychoanalysis following Horney. She was a leader, pioneer, and explorer in the conquest of illness and suffering. Young psychiatrists considering psychoanalytic training will be intrigued by this book.

Kelman's book includes a complete bibliography of Horney's work. We feel that readers wishing to further study her theories will be helped by reading the works of a number of other authors who have emphasized various aspects of her work (2–9).

"Psychopathology" in its many indelicate details has been brought out strikingly in literature. For example, *Portnoy's Complaint* (10) traced development from masturbation to guilt and impotence—to humiliation and looseness of personality organization and behavior. The cultural and familial origin of all of this is derived from Horney's emphasis on cultural contributions to neurosis, and is illustrated by the different and contrasting characteristics of the society, whether affluent and competitive or cooperative and collaborative,

as contributing to the strength and health of the individual.

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HAROLD H. MORRIS, JR., M.D.
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Death and the College Student: A Collection of Brief Essays on Death and Suicide by Harvard Youth, *edited by Edwin S. Shneidman, Ph.D. New York, Behavioral Publications, 1972, 207 pp., $4.95 (paper).*

The introduction to this book, the foreword, and the preface are written by men who speak with authority on the subject matter at hand. Farnsworth is nationally known for his work with college students in their various moods over a period of 40 years, and Shneidman, Professor of Medical Psychology at UCLA and erstwhile Chief of the Center for Studies of Suicide Prevention, NIMH, is an authority with long experience in the field of suicide prevention.

Except for chapter 4, "Combat Death," written by a Viet Nam veteran, the contributors were all Harvard students. The book makes for fascinating, if somewhat lugubrious, reading. Dr. Shneidman began a course in the Harvard undergraduate school on the "Psychology of Death," and a room that had 20 chairs drew 200 students the day the course began. All of the papers in this volume come from that course.

The 19 essays consist of brilliant personal reflections and contemplations of death as seen in active, if somewhat disturbed, young minds. One is impressed by the variety of approaches taken by the writers and the lively reporting of their musings and feelings. The essays range from "Death Is Alive and Well in the Ghetto" through "Hope and Suicide in a Concentration Camp" as seen from the perspective of an author 25 years later. The contents include "Growing Old, Death by the Installment Plan," on up through chapters on death in the philosophy of Sartre and of Unamuno, plus a section concerned with films and books on death.

It is difficult to single out any one chapter for special mention, for all of them are interesting and well written. "Death Is Alive and Well in the Ghetto" is reminiscent of the things we read about in the daily newspapers. The surroundings are distressing and life is cheap. There seems to be a large number of men willing to die, for they see little hope in their condition and see less to live for. The chapter that recalls to us the Nazi concentration camps is unrelieved horror. It is a wonder anyone came out alive. Apparently, from the behavior of their persecutors, the inmates were not meant to do so.

One young man placed an experimental classified ad in the newspapers which indicated that he intended to destroy himself unless someone could convince him of a good reason why he should not. He gave people three weeks to respond and sat back to see what would happen. His ad brought forth more than 100 letters voicing varying degrees of concern and indicated to him that there *were* people who really cared for others in distress.

The chapter on "The Funeral Industry in Boston" is reminiscent of the works of Jessica Mitford (1) and Evelyn Waugh (2). Both of those books shook up the undertakers—pardon me—funeral directors for a time, but the conversion didn't take with some and was soon forgotten by others. This chapter does not entice one to think of funeral directors with affection.

The chapter on the "Death Cult of James Dean" is fascinating. The cult was born on the day this surly, rebellious young man died in a sports car accident. The public, the author notes, went necrophiliac as the cult gained momentum. There were more than 2,700 persons at his funeral in his tiny hometown. Eleven months later he ranked number one in Photoplay magazine's actor popularity poll and drew 1,000 fan letters per week.

The chapter on "The Wake" and its significance gives good insight into the emotions of the participants in that particular import from abroad. Wakes undoubtedly serve a good purpose when kept in control. The portions of the book dealing with "Monolithic Daddyism" and chapter 11, titled "Manny Rap" (sic), were both a bit difficult for me.

Farnsworth comments that contrary to what might be expected, the rise of student despair and alienation has not caused waves of suicide, nor has experimentation with drugs and loss of confidence in and disillusionment with societal modes of regulation. "Private hopelessness or despair," he says, "rather than distress concerning public developments that is shared with one's peer group, is the paramount motive for suicide."

All who deal with young people of college age will want to read this book. It is not hammock reading, and it is not for taking along on one's honeymoon, but rather, read at a well-chosen time, it will bring insight and enlightenment regarding some wonderful, if confused, young people.

Commenting upon their actions has always been a penchant of older folks, and this probably contributes to keeping the latters' blood pressure in the higher ranges. We need say no more.

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F.J.B.

Genetic Factors in "Schizophrenia," *edited by Arnold R. Kaplan, Ph.D. Springfield, Ill., Charles C Thomas, 1972, 635 pp., $43.*

For the psychiatric clinician, this large volume may best be considered as a postgraduate course in the methods and problems currently associated with the genetic theory of schizophrenia. In one of the chapters dealing with critical appraisal of the various theories, it is pointed out that the clinician, qua clinician, is apt to be the eclectic, satisfied with theories that help him treat disease, vague or untestable though they may be. Most psychiatrists today, whether interested mainly in physiological methods or in psychotherapy, will include inborn factors in their list of causes of mental disorder. Many will be aware of the studies of families, twins, adoptees, and high-risk

offspring that over many decades have helped to organize thinking about schizophrenia; probably few will know enough about current research to deal critically with the conflicts among genetic theories, as well as their nosological implications and their relation to environmental variables.

For those who have prepared themselves by reading both classic and recent studies, Kaplan has assembled 34 distinguished contributors to weave a counterpoint of research data, hypothesis, and commentary. One major theme is the interdependence of diagnostic and etiological understanding. Schizophrenia research has a long and honorable tradition in medical genetics, but its unique difficulties have caused it to fall behind in the current race toward specifying molecular mechanisms. The aim of many of the chapters—to match specific psychopathology with specific predisposition—therefore is clear, but far from achieved.

Regarding nosology, the book contains many important discussions bearing on clinical heterogeneity, including process-reactive or typical-atypical dichotomies; while the very concept of schizophrenia is opened to question by some of the contributors (as the title of the book implies). At the same time the various arguments for single-gene, multifactorial, and genetic heterogeneity theories, as well as some biochemical and cytological hypotheses, are presented authoritatively and in detail by their proponents.

Among its other riches, the volume contains clinically oriented chapters on the relationship between childhood and adulthood schizophrenia, on genetic counseling, and on the study of high-risk children and their parents, as well as a fascinating follow-up story on the Genain quadruplets (1).

The book has the virtue of presenting specially written articles rather than a conference report, but even so there is some duplication of material. Although it contains a discussion section in which various authors comment on the earlier chapters, the editor himself actually does the best job of tying together the threads in his concluding statement.

To give the names of the contributing authors would require listing every one; suffice it to say that many of the well-known schizophrenia researchers on the national and international scene are included. The book contains a glossary and a very useful author reference index.

The economics of publishing have unfortunately caused a rather high price to be set on this book. Still, it is not an introductory work, but rather it thoroughly explores the implications of genetic studies in schizophrenia. For clinicians sufficiently informed and sophisticated to look beyond prematurely simplified explanations, and for current or prospective researchers, this book is strongly recommended supplementary reading.

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JOHN D. RAINER, M.D.
New York, N.Y.

The Public Challenge and the Campus Response, *edited by Robert A. Altman and Carolyn M. Byerly. Berkeley, University of California Center for Research and Development in Higher Education; and Boulder, Colo., Western Interstate Commission for Higher Education, 1971, 124 pp., $3.50 (paper).*

Colleges and universities have probably never been under such heavy criticism (or even attack) from so many sources as at present. Professor Brand Blanshard said many years ago that American education cannot have been too bad, or else it would not have produced so many excellent critics of itself. Certainly there is no current lack of critics, but whether most of them are excellent or mindless is a point at issue.

In this volume there is sharp but friendly debate regarding many aspects of the present low esteem in which college faculties and students are held by many people. Representatives of college administrations portray the concern of the public over what is perceived to be a gross lack of responsibility on the part of college faculties in controlling student disturbances. They also point out that such concern is usually met with hostility by both student and faculty campus leaders toward the fact that the public should be critical. Academic freedom, the tenure system, research work, and consultation work with public institutions are all under attack in various ways.

President Silber of Boston University makes an excellent plea for colleges to be headed by scholars who have administrative ability, rather than by persons trained primarily in administration. He also decries "the pointless obscenity and public abusiveness of many faculty members."

Warren Martin calls for a conspiracy for the future involving a fundamental change in our state of mind (malaise and confusion) and a drastic reordering of national priorities. The conspiracy would be one of conscience and humanity, one calculated to develop self-control of man before the world of his own making goes out of control. Walter Metzger discusses the academic profession in terms of its role in expressing a deep-seated desire in human beings to ennoble and sanctify human work. "To feel called, not driven, to one's vocation is to define a happiness no modern prospect can approach."

President McGill of Columbia University discusses the necessity for faculty members to act with honesty and integrity at all times, noting that only the faculty members can enforce their own standards. Some of his examples of faculty militants' dishonesty are real eye-openers.

At present it is difficult for a dispassionate observer to know who is more confused about the role of the universities and the issues that are seriously weakening them—faculty members or students. Yet it should be obvious as to who should be the most effective and active in developing and maintaining those standards which make a free, decent, and responsible life possible. A perusal of this volume should help in developing constructive programs for continued growth and renewal of the sources of our greatest hope for a life worth living—our colleges and universities.

DANA L. FARNSWORTH, M.D.
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Explanation in the Behavioural Sciences, *edited by Robert Borger and Frank Cioffi. New York, Cambridge University Press, 1971, 515 pp., $15.*

This volume is a collection of 12 essays ranging in subject matter from a discussion of the Skinnerian analysis of behavior, focusing mainly on the nature of responses, to Toulmin's essay on reasons and causes, which attempts to place causality on a continuum from behavior as an empirical phenomenon to behavior as a mediated phenomenon affected by basic brain mechanisms. These essays are extremely interesting reading, but will hardly offer any real practical applications to mental health practitioners busy with the vicissitudes of human behavior. For this reason it is quite unlikely that this book of readings will be widely popular with psychiatrists or with psychologists who are more interested in practical application than in theory.

Nevertheless, a number of these papers, with accompanying

criticisms by experts in the field, are fascinating reading and should appeal to those professionals involved in some of the more complex issues in the practice of psychiatry. For example, Toulmin's essay "Reasons and Causes" discusses exactly those considerations which one must go over when thinking about such problems as responsibility and justification of certain kinds of behaviors in criminals, patients with vague types of seizures (particularly where aggressive behavior is concerned) and the problem of responsibility for behavior in the individual with a drug-impaired state of awareness.

Of equal interest is I.C. Jarvie's "Understanding and Explanation in Sociology and Social Anthropology," which focuses on the problem of understanding behavior in individuals from different cultural backgrounds. Although the paper is basically a restatement of facts that are becoming more clear to us in the relationship of American society to its large minorities, the case and the problems are well stated.

For the reader interested in trying to understand the logic used to arrive at what looks on the surface like an illogical decision, Watkins' paper "Imperfect Rationality" will prove to be a fascinating discussion of the subject, particularly his case study of the logic in Vice-Admiral Tryon's maneuver of H.M.S. Victoria at Tripoli, which resulted in his death and the sinking of two of his flagships.

Like a smorgasbord, this collection has a little something for everyone, including a well-written paper by Boakes and Halliday, "The Skinnerian Analysis of Behaviour," which focuses primarily on Skinner's book *The Behavior of Organisms* (1). This article should be of particular interest to psychiatrists who have been bombarded recently by the input from learning theorists. It gives a fairly accurate description of the reasons why learning theory has been able to answer a number of the criticisms that have been continually leveled at the traditional approaches to psychotherapy. For those who are not particularly enamored of Skinner, Pribram's comment on the Boakes-Halliday paper makes the concise but explicit criticism of the Skinner position that it fails to take into consideration the operations of the organism in modifying the stimulus-response system.

For those who espouse the behavioral position and find themselves highly critical of the psychodynamic position, Cioffi's essay "Freud and the Idea of a Pseudo-Science" is an atom bomb of criticism that levels the psychoanalytic edifice for miles around.

Overall, it was a pleasure to read this volume. But it was also a chore because of the circularity of some of the reasoning, the endless preoccupation with the nuances of the philosophy of science, and a reengagement of free will and determinism, which, when the reading is finished, leaves you just about where you were when you started. Nevertheless, that seems to be where we are in the explanation of behavior, and all of the contributors and their critics seem to have done an excellent job in presenting their points of view.

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JAMES Q. SIMMONS III, M.D.
Los Angeles, Calif.

Apparitions and Ghosts: A Modern Study, *by Andrew MacKenzie. London, Arthur Barker, 1971, 176 pp., £1.75.*

Psychiatrists have such familiarity with hallucinations in mentally ill persons that they may easily think, and even be taught, that hallucinations occur only in relation to other evidences of psychopathology. This is not true. Since the last decades of the nineteenth century (1), abundant evidence of hallucinatory experiences among sane persons has accumulated. From time to time articles on the subject appear (2), and these help to remind us that (according to some surveys) more than ten percent of all persons questioned have had a hallucinatory experience at one time or another during their lives (3).

Hallucinations occurring in sane persons are usually visual experiences, or at least predominantly so. The person having the experience often becomes aware of the presence and actual appearance of another person, usually someone known to the percipient who, unknown to him, is undergoing a crisis somewhere else. Very commonly the person of the "apparition" is dying or has just died. Sometimes the percipient becomes aware of particular details of the manner of the death or of other aspects of the dying person's situation, such as unusual clothes he may be wearing. Experiences of this type suggest, at a minimum, some kind of telepathy between the dying person and the percipient, who "sees" his apparition.

Apparitions were reported abundantly to the psychical researchers (now usually called parapsychologists) of the last quarter of the nineteenth century. Then reports of them diminished, a fact that was noted by Tyrrell in his masterly review of the subject in 1953 (4). The decreasing number of reports of apparitions caused some discredit of the older accounts. The question was asked: "If these things happened as reported in the past, why do we not have accounts of similar experiences today?" The answer, at least for the average psychiatrist, seems to be: "Because you have frightened people into thinking that they must be mad if they have a hallucinatory experience, and so they do not confide in you anymore."

Andrew MacKenzie is a journalist in London and a part-time investigator of spontaneous cases in the field of parapsychology. He is a member of the council of the esteemed Society for Psychical Research, the oldest of the scientific groups studying these and related phenomena. In *Apparitions and Ghosts* Mr. MacKenzie has provided an account of 97 apparitional experiences he has personally learned about. He has investigated the cases with different depths of inquiry. For some he has had extensive interviews with informants and has taken signed depositions, and he reports some of these cases in much detail. Others he summarizes more briefly.

Mr. MacKenzie touches on theory and interpretations, but he does not become embroiled in controversy over them. His purpose has been mainly to report a new series of apparitional experiences with, in many cases, corroborating testimony concerning both the perception and the related events, of which the percipient became aware in his vision. Many of the cases reported in this book are recent and therefore support the explanation offered earlier as to why we have fewer reports than previously of hallucinations among the sane. People continue to have these experiences and probably have them just as frequently now as at any time in the past.

If, during the past 40 years or so, the persons having these experiences did not find it worthwhile to tell other persons (especially psychiatrists) about them, that was perhaps our fault, not theirs. At least I know from my own experience that, if one is ready to hear about such experiences, one can. I have listened to, or otherwise received, reports of about 40 apparitions presented by apparently reliable informants. The ones I have investigated have, in general, features quite similar to those Mr. MacKenzie describes. This book should help psychiatrists to become more open-minded and therefore more acceptable confidants when patients (or other persons) want to describe unusu-

al experiences. And the careful study of larger numbers of cases will provide a firmer basis for the interpretation of individual cases.

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Organizing the Community To Prevent Suicide, *edited by Jack Zusman, M.D., and David L. Davidson, M.D. Springfield, Ill., Charles C Thomas, 1971, 93 pp., $6.25.*

This brief but interesting book is a summation of presentations given at a workshop on suicidology held in Buffalo, N.Y., in 1968. Data about suicide are reviewed, as are the experiences of the participants, who have been leaders in setting up and running suicide and crisis centers and in training professionals and nonprofessionals in such programs.

Of note is Small and Opler's report of MacAuley's study on suicide and social integration in Buffalo (covering the years 1930 to 1954). As expected, suicides occurred more frequently in disorganized central districts, where social isolation is most marked. An unexpected finding was the higher suicide rate among white females then white males during the Depression, World War II, and the Korean War, with the inference that the signficant factor was the female's shift from maternal and homemaking roles to wartime or other employment. If this conclusion is valid, then one would expect a higher suicide rate among females in the future, as the employment and marital roles of women change in accord with current social trends. MacAuley found that the highest female suicide rate was among middle-aged married women who, in contrast to the traditional suicidal methods used by women, displayed more aggressivity by hanging themselves. The suicide rate was also striking among men in patriarchal-authoritarian families of middle-European background and of precarious social and economic status.

Shneidman reviews the rapid growth of suicide prevention programs from nine in 1964 to more than 100 in 1968, with a concurrent explosion of information on suicide. He estimates that there are at least 50,000 suicides a year, with at least 400,000 attempts. In addition to prevention and intervention, he discusses "postvention"—dealing with the bereaved families of the persons who commit suicide as well as with the further care and handling of the unsuccessful suicide attempter.

Various workshop participants discuss the establishment of suicide prevention programs, the use of volunteers and trained laymen, the squabbles among the professionals, and the concept of the suicide prevention center in relation to the crisis center and the broad-based community mental health center.

Zusman favors the ultimate demise of suicide prevention centers by incorporating their functions into more relevant and global community-oriented mental health programs. Limitations of money, professional and nonprofessional personnel, and overall community resources raise an economic question as to the best use of what is available. The community approach offers a rapidly accessible first-aid station available to large numbers of people and more adaptable in terms of correlation with other social welfare agencies and care resources of all types.

A theme running through the book is the focus on suicide as part of a broader problem of crisis intervention, with an evolution from the suicide prevention center to the crisis intervention center to the community mental health center. The latter facility can comprehend the most effective and economic use of suicide prevention (and principles thereof) as taught by the considerable number of specialists of various backgrounds who now provide leadership in this field.

This low-caloric book (93 pages) comes at a price ($6.25) at which one would have hoped for more gourmet delights. The sketchiness of detail detracts from its usefulness; on the other hand, the book is very readable and can be absorbed in an hour or two. I would have preferred a more extensive discussion of some of the content, which is limited as a source of information and even more so as a manual to accomplish the goal of organizing the community to prevent suicide. Brevity may be the soul of wit, but unfortunately, it is not the sole of wit.

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The Annual Survey of Psychoanalysis, vol. 10: A Comprehensive Survey of Current Psychoanalytic Theory and Practice, *edited by John Frosch, M.D., and Nathaniel Ross, M.D. New York, International Universities Press, 1972, 420 pp., $15.*

There are few fields of medicine in which the literature is more burdened with a plethora of confusing verbiage and specialized jargon than that of psychoanalysis. It is not surprising therefore that when John Frosch and a doughty, small band of collaborators undertook to publish an annual survey of the psychoanalytic literature they soon ran into mounting difficulties in their efforts to condense and summarize it. Thus the first volume, a review of the literature of 1950, did not make its appearance until 1952.

Subsequent reviews similarly took an average of two years each to prepare, despite a substantial increase in the number of collaborating editors. Consequently, the present volume, tenth in the series, and now jointly edited by Frosch and Nathaniel Ross, with an editorial board of ten psychoanalysts and the assistance of 53 contributing editors, has only gotten up to the psychoanalytic literature of 1959. This, of course, makes a mockery of the series' subtitle, which cites a comprehensive survey of "current" psychoanalytic theory and practice. At the present rate the psychoanalytic survey of 1971's literature will not appear before 1995!

One may properly raise the question, however, as to whether this actually makes very much difference. A recent article in the *Archives of General Psychiatry* (1) raised serious doubts as to whether any really valuable or original work has taken place within the context of traditional psychoanalysis in the past 30 years. Perhaps, however, that is too harsh a judgment Certainly individuals such as Hartmann, Erikson, Anna Freud, Melanie Klein, Mahler, and Spitz, among others, have had a significant impact upon classical psychoanalytic theory, although less so upon therapy. Others, such as Rado, Kardiner, Alexander, French, Horney, and Sullivan, have possibly had a greater impact upon both theory and technique, but they are generally considered to be renegades by the more traditional followers of Freud. It cannot be accidental that Frosch and Ross have not

even deigned to include the *American Journal of Psychoanalysis*—the official organ of the Horney psychoanalytic group—among the journals selected for review.

Nonetheless, the present volume, like those which have preceded it, has much that is of interest, particularly for the psychoanalytically oriented reader. Despite all of its shortcomings as a therapeutic technique, psychoanalysis as theory, and particularly as a method of investigation of unconscious processes, offers insights into human motivation, fantasy, and behavior that no other approach can match. This is not a book that one sits down to read from cover to cover, but for those with special interests in psychoanalytic theory and therapy and their applications as of 1959 to a diverse number of clinical, educational, and cultural problems, it will offer rewarding browsing. The volume is well indexed.

REFERENCE

1. Hofling CK, Meyers RW: Recent discoveries in psychoanalysis: a study of opinion. Arch Gen Psychiatry 26:518–523, 1972

JUDD MARMOR, M.D.
Los Angeles, Calif.

Recollection and Reconstruction; Reconstruction in Psychoanalysis, *edited by Bernard D. Fine, M.D., Edward D. Joseph, M.D., and Herbert F. Waldhorn, M.D. New York, International Universities Press, 1971, 128 pp., $4 (paper).*

This is the fourth in a series of monographs reporting meetings on specific topics of the Kris Study Group of the New York Psychoanalytic Institute. The first section summarizes meetings held in 1958–1959 and the second section, those held in 1960–1961.

The book begins with a brief review of the Freudian literature. Meanings are "interpreted," but conflicts, fantasies, and events are "reconstructed" (p. 63). The monograph is interesting for the way in which the clinical examples are presented and for the discussants' assumptions and ways of thought, which reflect the gradual trend toward somewhat more dynamic thinking. However, the superego is still presumed to be formed "between four to six years of age, when infantile amnesia begins" (p. 57). In addition, the remarkable appearance in the very earliest recollections of important emotional patterns of a person's life, e.g., accident-proneness, loneliness, and so forth, is not explicitly discussed, and the relevant literature is not mentioned.

The monograph makes no pretense of reaching definitive conclusions, as its purpose is clarification of current knowledge and theory for future studies. A general difference of opinion and conclusion appears between the positions of Greenacre and Kris. Greenacre holds that analysis is genetic and therefore must reconstruct traumatic experiences, while Kris's view was that the modifications and elaboration to which these experiences are subjected make simple reconstruction impossible. All agreed that genetic, dynamic, structural, and economic factors are involved, but there seems to be little attention to why an event may be traumatic for one child and not for another and to the role of reconditioning, of the corrective emotional experience, in the use of recollection and reconstruction for therapy.

The discussions are careful and thoughtful within their frame of reference.

LEON J. SAUL, M.D.
Media, Pa.

Inside Psychotherapy, *edited by Adelaide Bry. New York, Basic Books, 1972, 162 pp., $6.95.*

This is a neat little book. On picking it up one expects to find the potpourri usually associated with books in which each chapter is written by a different author. In addition, one wonders how anyone could provide a satisfactory *überblick* of psychotherapy, as practiced by so many clinicians, in such a short volume.

As one reads the book, he is immediately impressed by Dr. Lewis Wolberg's introduction. This gem should be required reading for all beginning psychiatrists who want to know what psychotherapy is all about. Dr. Wolberg succinctly describes many different approaches and theories. He compares one with another, skillfully weaves together the approaches of different authorities when possible, pointedly suggests differences that may or may not be significant, indicates those conditions where one approach seems more likely to be successful than another, and gently depicts the limitations of therapies and therapists. He does not say that there is more than one way to skin a cat, but he makes the point so persuasively that any psychiatrist who believes that only one approach is the right one will have to reconsider his position.

If one stops after reading only the introduction, one's time has been well spent. If one continues to read the book, however, a pleasant surprise is in store. The editor recounts direct, emotionally involved interviews that she conducted with nine psychotherapists of different disciplines. This format provides much information about the conduct of the psychotherapeutic relationship and makes for stimulating and exciting reading. One feels that he is actually sitting in on the conversations between the editor and her consultants.

The consultants include Van Buren O. Hammett, M.D. (who wrote the chapter on "Psychoanalytic Therapy"), David Hart, Ph.D. ("Jungian Therapy"), Erwin Singer, Ph.D. ("Frommian Therapy"), Frederick Perls, M.D. ("Gestalt Therapy"), Joseph Wolpe, M.D. ("Behavioral Therapy"), Ross Speck, M.D. ("Family Therapy"), Ian Alger, M.D. ("Group Therapy"), Frederick Stoller, Ph.D. ("Encounter Group Therapy"), and Paul Bindrim ("Nude Marathon Therapy").

These men all extend themselves to describe their approaches. Much more than a simple descriptive overview is provided in each case. The editor has the ability to bring out, in interview format, such lively discussions of therapy and technique that it is hard to believe how much material is actually covered.

Do not read this book is you want to learn how to conduct psychotherapy. But if you want to know what psychotherapy is all about, read it. Even if you know most of the content of the book, you'll still enjoy it.

LUDWIG M. FRANK, M.D.
West Hartford, Conn.

The Interface between Psychiatry and Anthropology, *edited by Iago Galdston, M.D. New York, Brunner/Mazel, 1971, 150 pp., $7.50.*

This collection of six papers, authored and coauthored by three physicians, one biologist, and three anthropologists, is intended to promote a better understanding of the "synergic relations between anthropology and psychiatry." The former is conceived as dealing with "the short range behavioral history of man" in terms of his *Eigenwelt*, *Mitwelt*, and *Umwelt*.

E.D. Wittkower and Guy Dubreuil open the argument with a historical review of patterns of mutual borrowing from the tool

kits and approaches of each field and of some of the resulting insights into the complex cross-cultural problems of etiology, symptomatology, treatment, and prevention. While their "reflections on the interface" are useful, they are more in the nature of "an outline of the borderline area between psychiatry and cultural anthropology" (p. 20).

R.B. Edgerton examines the question of order and the fact of cultural diversity in man-made rules for adapting to the environment as a matter of central concern to the fields of both anthropology and psychiatry. Of special interest is his treatment of the ubiquitousness of human willfulness and deviance, "no matter *what* form . . . culture will take." Although phrased essentially in voluntaristic terms, his reflections on the cross-cultural evidence on the "ambiguity" or "conscious avoidance of specificity" in rules of conduct and on the "negotiability of deviant acts" are well taken. He is correct in exhorting anthropologists to study the nature of human nature more in bio-behavioral terms and psychiatrists to study all men—"not merely patients."

W. Goldschmidt attempts to demonstrate the usefulness of the Greek concept of *areté* to "the understanding of both social systems and of individual behavior." He uses this term synonymously with dominant or ideal values, e.g., "the qualities a person should ideally possess, according to the consensus of the community" (p. 58). The manner in which the landscape of "diverse forms of areté" is presented does not lend itself to an illuminating assessment of the central problem of conceptually and methodologically linking human values with motivation.

The late Ludwig von Bertalanffy is most persuasive in marshaling diverse evidence for the utility of "the system view" in the "investigation of human singularity" in the mind-body relationship. He succeeds, even if indirectly, in pointing to the locus of the interface between anthropology and psychiatry: "Concepts such as organization, goal-directedness, differentiation, development and the like . . . concerning aspects beyond the mechanistic scheme . . . can give some answer to the question of meaning, which is nothing else than connection within a whole or a system" (pp. 115–117). The many-faceted, contingent relationships between meaning and cause must be elucidated with more theoretical vigor if the two fields truly wish to join hands in the study of "disturbance of system functions of the experiencing ego" (p. 108).

S.S. Kety succinctly states the most salient findings bearing on the probable "mechanics" of the behavior of the biochemical substrates of affect and learning. His profound understanding of the subject allows him to conclude that, although "there will someday be a biochemistry of memory but hardly ever one of memories . . . it is only by an appropriate collaboration between biology and the sciences which deal with information and experience that an understanding of human behavior will be approached" (p. 137).

G.M. Carstairs' urbane observations about man's social and cultural world are an urgent invitation to liberate more scientific energy for the proper understanding of "human social intercourse" beyond the continuing scientific and technological preoccupation "with consciously perceived cognitive messages" and with the "exploitation of . . . cognitive faculties" (p. 147).

Iago Galdston is to be commended for having succeeded in putting together a readable and stimulating volume on the continuing search to transcend conceptual, technical, and professional walls that still hang between psychiatrists and anthropologists. Careful reflection on the ideas and evidence presented should move future research efforts to a deeper level of cooperation than has been attained to date.

OTTO VON MERING, PH.D.
Gainesville, Fla.

This Month's Reviewers

KENNETH E. APPEL, M.D., is Professcr Emeritus, Department of Psychiatry, University of Pennsylvania School of Medicine, Philadelphia, Pa.; HAROLD H. MORRIS, JR., M.D., is Director of Psychiatry, Misericordia Hospital, Philadelphia, Pa.

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Books Received

This listing acknowledges the receipt of recent books. Books of particular interest to the readers of this journal will be reviewed as space permits, and copies of the reviews will be sent to the publishers. Books cannot be returned to the publishers.

The Social Animal, *by Elliot Aronson. New York, Viking Press, 1972, 313 pp., $7.95.*

Basic Medical Statistics, *by Anita K. Bahn, Sc.D., M.D. New York, Grune & Stratton, 1972, 248 pp., no price listed (paper).*

Survivors of Suicide, *edited by Albert C. Cain, Ph.D. Springfield, Ill., Charles C Thomas, 1972, 303 pp., $14.75.*

Helping the Helpers to Help: Mental Health Consultation to Aid Clergymen in Pastoral Work, *by Ruth B. Caplan. New York, Seabury Press, 1972, 234 pp., $6.95.*

Aspects of Human Efficiency: Diurnal Rhythm and Loss of Sleep, *edited by W.P. Colquhoun. New York, Crane, Russak & Co. (U.S. distributor), 1972, 344 pp., $20.50.*

The Psychiatric Patient: Case Histories, *by Lois Jean Davitz, Ph.D. New York, Springer Publishing Co., 1971, 202 pp., $6.95.*

Interviewing and Patient Care, *by Allen J. Enelow, M.D., and Scott N. Swisher, M.D. New York, Oxford University Press, 1972, 226 pp., $3.95 (paper).*

Learning Disabilities: A Book of Readings, *compiled and edited by Larry A. Faas. Springfield, Ill., Charles C Thomas, 1972, 257 pp., $10.75.*

International Symposium: Biological Aspects of Alcohol Consumption, *September 27–29, 1971, Helsinki, edited by Olof Forsander and Kalervo Eriksson. New Brunswick, N.J., Rutgers Center of Alcohol Studies (U.S. distributor), 1972, 291 pp., $7.50.*

Advanced Studies in Criminology, *by Arthur N. Foxe, M.D. New York, Tunbridge Press, 1972, 90 pp., $4.75.*

Der Wille zum Sinn, *by Viktor E. Frankl. Bern, Switzerland, Verlag Hans Huber, 1972, 283 pp., DM 28 (paper).*

Modern Synopsis of *Comprehensive Textbook of Psychiatry*, *by Alfred M. Freedman, M.D., Harold I. Kaplan, M.D., and Benjamin J. Sadock, M.D. Baltimore, Williams & Wilkins Co., 1972, 800 pp., $15.95 (paper).*

Sleep Research: A Critical Review, *by Frank R. Freemon, M.D. Springfield, Ill., Charles C Thomas, 1972, 200 pp., $14.50.*

Attachment and Dependency, *edited by Jacob L. Gewirtz, Ph.D. New York, Halsted Press (John Wiley & Sons) (distributor), 1972, 225 pp., $10.95.*

Emergency Care, *by Harvey Grant and Robert Murray. Washington, D.C., Robert J. Brady Co. (Prentice-Hall), 1971, 319 pp., no price listed (paper).*

Handbook of Psychophysiology, *edited by Norman S. Greenfield and Richard A. Sternbach. New York, Holt, Rinehart and Winston, 1972, 980 pp., no price listed.*

The Sex-Life Letters, *compiled by Dr. Harold Greenwald and Ruth Greenwald. New York, Crown Publishers (distributor), 1972, 426 pp., $7.95.*

Childhood Psychopathology: An Anthology of Basic Readings, *edited by Saul I. Harrison, M.D., and John F. McDermott, M.D. New York, International Universities Press, 1972, 882 pp., $20.*

Research Planning and Action for the Elderly, *edited by Donald P. Kent, Ph.D., Robert Kastenbaum, Ph.D., and Sylvia Sherwood, Ph.D. New York, Behavioral Publications, 1972, 544 pp., $22.95.*

The Neuroses, *by P.C. Kuiper, M.D., Ph.D. New York, International Universities Press, 1972, 251 pp., $9.*

International Directory of Investigators in Psychopharmacology, *edited by Alice A. Leeds, M.D. Rockville, Md., International Reference Center for Information on Psychotropic Drugs, National Institute of Mental Health, 1972, 439 pp., no price listed (paper).*

The Projective Use of the Bender Gestalt, *by Edna Albers Lerner. Springfield, Ill., Charles C Thomas, 1972, 86 pp., $10.75.*

The Fallacy of Understanding: An Inquiry into the Changing Structure of Psychoanalysis, *by Edgar A. Levenson, M.D. New York, Basic Books, 1972, 223 pp., $7.95.*

The Psychoanalytic Forum, vol. 4, *edited by John A. Lindon, M.D. New York, International Universities Press, 1972, 452 pp., $15.*

Evaluation and Management of the Violent Patient: Guidelines in the Hospital and Institution, *by John R. Lion, M.D. Springfield, Ill., Charles C Thomas, 1972, 74 pp., $6.*

Intimacy: The Essence of Male and Female, *by Shirley Gehrke Luthman. Los Angeles, Nash Publishing Corp., 1972, 164 pp., $7.95.*

Man for Humanity: On Concordance vs Discord in Human Behavior, *edited by Jules H. Masserman, M.D., and John J. Schwab, M.D. Springfield, Ill., Charles C Thomas, 1972, 357 pp., $20.50.*

Public Expectations and Health Care: Essays on the Changing Organization of Health Services, *by David Mechanic, Ph.D. New York: John Wiley & Sons, 1972, 302 pp., no price listed.*

The Mental Health Service after Unification: Mental Health in a Unified National Health Service—Report of the Tripartite Committee. *London, Journal Department, British Medical Association (distributor), 1972, 95 pp., 50p (paper).*

A Milieu Therapy Program for Behaviorally Disturbed Children, *by Marjorie McQueen Monkman. Springfield, Ill., Charles C Thomas, 1972, 281 pp., $14.50.*

The One Quest, *by Claudio Naranjo. New York, Viking Press, 1972, 238 pp., $8.95.*

Counseling Parents of the Emotionally Disturbed Child, *edited by Robert L. Noland. Springfield, Ill., Charles C Thomas, 1972, 417 pp., $11.50.*

Information, Systems, and Psychoanalysis: An Evolutionary Biological Approach to Psychoanalytic Theory, *by Emanuel Peterfreund, M.D., with Jacob T. Schwartz, Ph.D. New York, International Universities Press, 1972, 388 pp., $15.*

Moral Values and the Superego Concept in Psychoanalysis, *edited by Seymour C. Post, M.D. New York, International Universities Press, 1972, 490 pp., $15.*

Two Essays on the Mind, *by Benjamin Rush, M.D. (facsimile reprint). New York, Brunner/Mazel, 1972, 74 pp., $6.*

Hypnosis: A Social Psychological Analysis of Influence Communication, *by Theodore R. Sarbin and William C. Coe. New York, Holt, Rinehart and Winston, 1972, 276 pp., no price listed.*

Clinical Supervision of the Psychiatric Resident, *by Daniel B. Schuster, M.D., John J. Sandt, M.D., and Otto F. Thaler, M.D. New York, Brunner/Mazel, 1972, 328 pp., $10.*

Psychiatric Complications of Medical Drugs, *edited by Richard I. Shader, M.D. New York, Raven Press, 1972, 387 pp., $14.50.*

Youth: Problems and Approaches, *edited by S.J. Shamsie, M.D. Philadelphia, Lea & Febiger, 1972, 384 pp., $8 (paper).*

Drug Addiction, vol. 2: Clinical and Socio-Legal Aspects, *edited by Jasbir M. Singh, Ph.D., Lyle H. Miller, Ph.D., and Harbans Lal, Ph.D. Mount Kisco, N.Y., Futura Publishing Co., 1972, 284 pp., $13.75.*

Where Do I Go to Buy Happiness? Insights of a Christian Counselor, *by Elizabeth Skoglund. Downers Grove, Ill., InterVarsity Press, 1972, 157 pp., $3.95.*

Contemporary Psychiatry, *by Laurence H. Snow, M.D. Chicago, Year Book Medical Publishers, 1972, 302 pp., no price listed (paper).*

Television and Growing Up: The Impact of Televised Violence. *Report to the Surgeon General, U.S. Public Health Service. Washington, D.C., U.S. Government Printing Office, 1972, 169 pp., no price listed (paper).*

University of Minnesota Research, Development and Demonstration Center in Education of Handicapped Children, Annual Report: 1971–1972. *Minneapolis, University of Minnesota, 1972, 41 pp., no price listed (paper).*

Psychotropic Drugs and Related Compounds, *2nd ed., by Earl Usdin, Ph.D., and Daniel H. Efron, M.D., Ph.D. Washington, D.C., U.S. Government Printing Office, 1972, 791 pp., $7.50.*

Phallós: A Symbol and Its History in the Male World, *by Thorkil Vanggaard. New York, International Universities Press, 1972, 204 pp., $9.*

Ageing of the Central Nervous System: Biological and Psychological Aspects, *edited by H.M. van Praag and A.F. Kalverboer. Haarlem, The Netherlands, De Erven F. Bohn N.V., 1972, 193 pp., Dfl. 35 (paper).*

The Making of a Psychiatrist, *by David S. Viscott, M.D. New York, Arbor House, 1972, 410 pp., $8.95.*

Clinical Practice in Community Mental Health Centers, *by H.G. Whittington, M.D. New York, International Universities Press, 1972, 157 pp., $8.50.*

Lecture Notes on Psychiatry, *3rd ed., by James Willis, M.B., D.P.M. Philadelphia, F.A. Davis Co., 1972, 127 pp., $3.50 (paper).*

The Women's Movement: Social and Psychological Perspectives, *edited by Helen Wortis and Clara Rabinowitz. New York, AMS Press, 1972, 151 pp., $3.75 (paper).*

Legacy of Love: The Right to Mental Health, *by William Bauer, M.D. New York, Vantage Press, 1972, 314 pp., $7.95.*

OFFICIAL ACTIONS

The American Board of Psychiatry and Neurology

The following are those who successfully completed the Board examination given in St. Louis, Mo., October 2–3, 1972.

PSYCHIATRY

Ackerman, John M., M.D., Santa Barbara, Calif.
Adams, Elizabeth M., M.D., Honolulu, Hawaii
Ajans, Zaki A., M.D., Columbia, Mo.
Aleksander, Bernardo G., M.D., St. Louis, Mo.
Altman, Michael A., M.D., Denver, Colo.
Altshul, Victor A., M.D., New Haven, Conn.
Alverno, Luca, M.D., Milwaukee, Wis.
Amdur, Millard J., M.D., Willimantic, Conn.
Anders, Eric R., M.D., Kuala Lumpur, Malaysia
Arnold, Charles S., M.D., San Antonio, Tex.
Axelson, Alan A., M.D., McMurray, Pa.
Bach-y-Rita, George, M.D., San Francisco, Calif.
Backus, Frank I., M.D., Seattle, Wash.
Baker, Max A., M.D., Fort Smith, Ark.
Bakos, Edward R., M.D., Cleveland, Ohio
Ball, Joseph W., M.D., Portland, Ore.
Ballard, Bruce L., M.D., Riverdale, N.Y.
Barash, Harvey A., M.D., New York, N.Y.
Barton, Fred D., M.D., Copley, Ohio
Bass, Barry C., M.D., Beverly Hills, Calif.
Berkower, Lary R., M.D., Southfield, Mich.
Berkowitz, Bernard, M.D., Delmar, N.Y.
Berlin, Robert J., M.D., Silver Spring, Md.
Bess, Barbara E., M.D., New York, N.Y.
Bethel, James W., M.D., Oakland, Calif.
Birger, Daniel M., M.D., Larchmont, N.Y.
Blakey, Robert E., M.D., Maitland, Fla.
Borelli, Nelson, M.D., Wilmette, Ill.
Boydstun, James A., M.D., APO New York, N.Y.
Brannen, James O., M.D., Decatur, Ga.
Breneman, Donald P., M.D., Pittsburgh, Pa.
Brodey, James F., M.D., West Hartford, Conn.
Brody, Michael, M.D., Washington, D.C.
Bruns, William C., M.D., Omaha, Neb.
Cadoret, Remi J., M.D., St. Louis, Mo.
Califano, Paul F., M.D., New York, N.Y.
Callahan, Joseph D., M.D., St. Louis, Mo.
Callen, Kenneth E., M.D., APO Seattle, Wash.
Cancellaro, Louis A., M.D., Ph.D., Greensville, S.C.
Casillas, Ernest A., M.D., San Antonio, Tex.
Cates, William J., M.D., Newark, Ohio
Cavanagh, Ronald J., M.D., Portsmouth, R.I.
Caycedo, Jorge H., M.D., Topeka, Kans.
Chambers, Donald S., M.D., Fort Smith, Ark.
Charles, Andrew V., M.D., Chicago, Ill.
Charles, Sara C., M.D., South Bend, Ind.
Cherlin, Edward A., M.D., San Diego, Calif.
Christopoulos, Angelos C., M.D., Chicago, Ill.
Cion, Maurice C., M.D., Belmont, Mass.
Clark, Julian J., M.D., Brooklyn, N.Y.
Clemente, Jack M., M.D., New York, N.Y.
Cohen, Donald J., M.D., New Haven, Conn.
Cohen, Stephen M., M.D., Charlotte, Vt.
Craven, Nicholas S., M.D., Charleston, S.C.
Cuculic, Zarko, M.D., Paramus, N.J.
Custer, Robert L., M.D., Brecksville, Ohio
Damptz, Robert E., M.D., Hinsdale, Ill.
Davidson, Robert E., M.D., Barrington, R.I.
Davies, Robert K., M.D., New Haven, Conn.
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Diamond, Leon, M.D., Evanston, Ill.
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Donovan, Francis C., M.D., Pittsburgh, Pa.
Dorzab, Joe H., M.D., Fort Smith, Ark.
Drake, Fenton G., M.D., Springfield, Ill.
Dublis, Astrid M., M.D., Howard Beach, N.Y.
Dublis, Robert A., M.D., Howard Beach, N.Y.
Dusay, John M., M.D., San Francisco, Calif.
Edens, C. J., M.D., Columbia, S.C.
Edwardson, Phillip L., M.D., Minneapolis, Minn.
Enowitch, Bennett I., M.D., Hartford, Conn.
Favazza, Armando R., M.D., Oakland, Calif.
Feighner, John P., M.D., San Diego, Calif.
Fesler, James A., M.D., Tampa, Fla.
Fitzgerald, Roy G., M.D., Swarthmore, Pa.
Fodor, Richard L., M.D., Rocky River, Ohio
Forsthoefel, Frank E., M.D., Columbia, S.C.
Foster, Douglas L., M.D., Chicago, Ill.
Fraser, David B., M.D., North Little Rock, Ark.
Friedel, Robert O., M.D., Durham, N.C.
Friedman, Howard P., M.D., Hunington Woods, Mich.
Froelich, Ralph D., M.D., Madison, Wis.
Frogel, Marvin P., M.D., Great Neck, N.Y.
Funderburk, Daniel C., M.D., Whittier, Calif.
Gallahorn, George E., M.D., Columbia, Md.
Gardener, Ralph, M.D., Pittsburgh, Pa.
Gaw, Albert C., M.D., Newton Center, Mass.
Getman, Richard B., M.D., Westwood, Mass.
Glassman, Barry M., M.D., North Miami Beach, Fla.
Glick, Howard N., M.D., Sherman Oaks, Calif.
Glick, Robert A., M.D., New York, N.Y.
Golwyn, Daniel H., M.D., Winter Park, Fla.
Gottlieb, Raymond L., M.D., Westfield, Mass.
Graf, John A., M.D., Rochester, Minn.
Grant, Igor, M.D., La Jolla, Calif.
Green, Amy, M.D., New York, N.Y.
Green, James C., M.D., Asheville, N.C.
Greenspan, Stanley I., M.D., Washington, D.C.
Guttmacher, Jonathan A., M.D., Brookline, Mass.
Halperin, Edward N., M.D., New York, N.Y.
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Hanscom, Robert J., M.D., Berkeley, Calif.
Haring, Gene F., M.D., Mountain Top, Pa.
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Hauser, Charles E., M.D., Houston, Tex.
Heckman, Harold K., M.D., Glenside, Pa.

Heinrichs, Daniel J., M.D., Reedley, Calif.
Heiser, Jon F., M.D., South Laguna, Calif.
Hensley, Ronald V., M.D., Hartford, Conn.
Hepps, Robert B., M.D., Berkeley, Calif.
Herts, John B., M.D., Baltimore, Md.
Herzberg, Joseph, M.D., Rockville, Md.
Heyl, Bruce A., M.D., Appleton, Wis.
Hickerson, Otrie B., M.D., Jackson, Miss.
Hills, Fontaine S., M.D., Memphis, Tenn.
Himot, Linda J., M.D., Pittsburgh, Pa.
Hirsch, Stuart D., M.D., Pittsburgh, Pa.
Hjortsvang, Kenneth W., M.D., Martinez, Calif.
Hoffman, Robert D., M.D., Denver, Colo.
Houghton, Edward A., M.D., Annandale, Va.
Houghton, William J., M.D., Milwaukee, Wis.
Hudson, Charles J., M.D., Anchorage, Alaska
Hughes, James E., M.D., Los Angeles, Calif.
Humphries, Robert H., M.D., New Canaan, Conn.
Hutchinson, Richard C., M.D., Bratenahl, Ohio
Ingram, William L., M.D., Manitou Springs, Colo.
Israely, Robert A., M.D., Washington, D.C.

Jacobson, Seymour B., M.D., New York, N.Y.
Janzen, Calvin L., M.D., San Francisco, Calif.
Jordan, Kent, M.D., Cardiff, Calif.
Jurczak, Dennis M., M.D., Great Lakes, Ill.

Kafi, Ahmad, M.D., Livonia, Mich.
Kaplan, Joel H., M.D., Woodmere, N.Y.
Karasu, Toksoz B., M.D., New York, N.Y.
Katzow, Jacob J., M.D., San Francisco, Calif.
Kayton, Lawrence, M.D., Oak Park, Ill.
Keegan, David L., M.D., Saskatoon, Sask., Canada
Keller, Kent E., M.D., LaCrosse, Wis.
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Sholevar, G. Pirooz, M.D., Narberth, Pa.
Shore, James H., M.D., Portland, Ore.
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Simons, Ronald C., M.D., East Lansing, Mich.
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Wolf, R. H., M.D., Kirkwood, Mo.
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Wright, James J., M.D., Indianapolis, Ind.
Wright, James S., M.D., Baltimore, Md.
Yusin, Alvin S., M.D., Los Angeles, Calif.
Zagoloff, Anna, M.D., New York, N.Y.

NEUROLOGY

Andriola, Michael J., M.D., Largo, Fla.
Ansari, Khurshed A., M.D., Rosemount, Minn.
Blumenthal, Harvey J., M.D., Tulsa, Okla.
Bobowick, A. Roger, M.D., Waterbury, Conn.
Booss, John, M.D., Brooks AFB, Tex.
Borenstein, Alan, M.D., Hollywood, Fla.
Boulware, Frederick T., Jr., M.D., Las Vegas, Nev.
Boyer, Stanley W., M.D., Madison, Wis.
Bromer, Michael D., M.D., Minneapolis, Minn.
Brown, Jason W., M.D., Bronxville, N.Y.
Burton, Robert A., M.D., San Francisco, Calif.
Camenga, David L., M.D., Towson, Md.
Corsello, Guy R., M.D., Pittsburgh, Pa.
DeLong, George R., M.D., Boston, Mass.
Eckholdt, John W., M.D., Baltimore, Md.
Edmeads, John, M.D., Toronto, Ont., Canada
Farber, Roger E., M.D., Edina, Minn.
Flaten, Paul A., M.D., Ft. Lauderdale, Fla.
Frankel, Jeffrey, M.D., Livingston, N.J.
Gabor, Andrew J., M.D., Davis, Calif.
Gotshall, Robert A., Jr., M.D., Seattle, Wash.
Griggs, Robert C., M.D., Rochester, N.Y.
Haidri, Nazar H., M.D., West Caldwell, N.J.
Hughes, Patrick J., M.B., Williamsville, N.Y.
Kole, Bruce H., M.D., Bloomfield Hills, Mich.
Kunin, Joel M., M.D., San Diego, Calif.
Lee, Myoung C., M.D., Minneapolis, Minn.
Martin, Dennis L., M.D., Temple, Tex.
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Miller, Donald R., M.D., Colton, Calif.
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Rowe, Melvin J. III, M.D., Rochester, Minn.
Rowen, Richard I., M.D., Ph.D., San Diego, Calif.
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Sanders, Donald B., M.D., Rochester, Minn.
Satinsky, David, M.D., Potomac, Md.
Scaer, Robert C., M.D., Boulder, Colo.
Simowitz, Fredric M., M.D., St. Louis, Mo.
Sutton, Granger G., M.D., Lutherville, Md.
Taylor, John R., M.D., Midlothian, Va.
Troost, Bradley T., M.D., Miami Shores, Fla.
Wagshul, Alan M., M.D., Miami, Fla.
Walker, Jonathan E., M.D., Denver, Colo.
Walsh, Gregory O., M.D., Los Angeles, Calif.
Wanamaker, William M., M.D., Madison, Wis.
Wechsler, Adam F., M.D., Pacific Palisades, Calif.
Weintraub, Michael I., M.D., Cahppaqua, N.Y.
Westmoreland, Barbara F., M.D., Rochester, Minn.
Whitaker, John N., M.D., Minneapolis, Minn.
Wolpow, Edward R., M.D., Boston, Mass.

CHILD NEUROLOGY

Andrioloa, Mary T. R., M.D., Largo, Fla.
Bart, Robert D., Jr., M.D., Honolulu, Hawaii
Cadman, Thomas E., M.D., Danville, Pa.
Deuel, Ruthmary K., M.D., Chicago, Ill.
DeVivo, Darryl C., M.D., St. Louis, Mo.
Fishman, Marvin A., M.D., St. Louis, Mo.
Forman, Phillip M., M.D., Galveston, Tex.
Groover, Robert V., M.D., Rochester, Minn.
Lenn, Nicholas J., M.D., Ph.D., Chicago, Ill.
Logan, William J., M.D., Charlottesville, Va.
O'Tuama, Lorcan A., M.B., Chapel Hill, N.C.
Schultz, Paul, M.D., San Diego, Calif.

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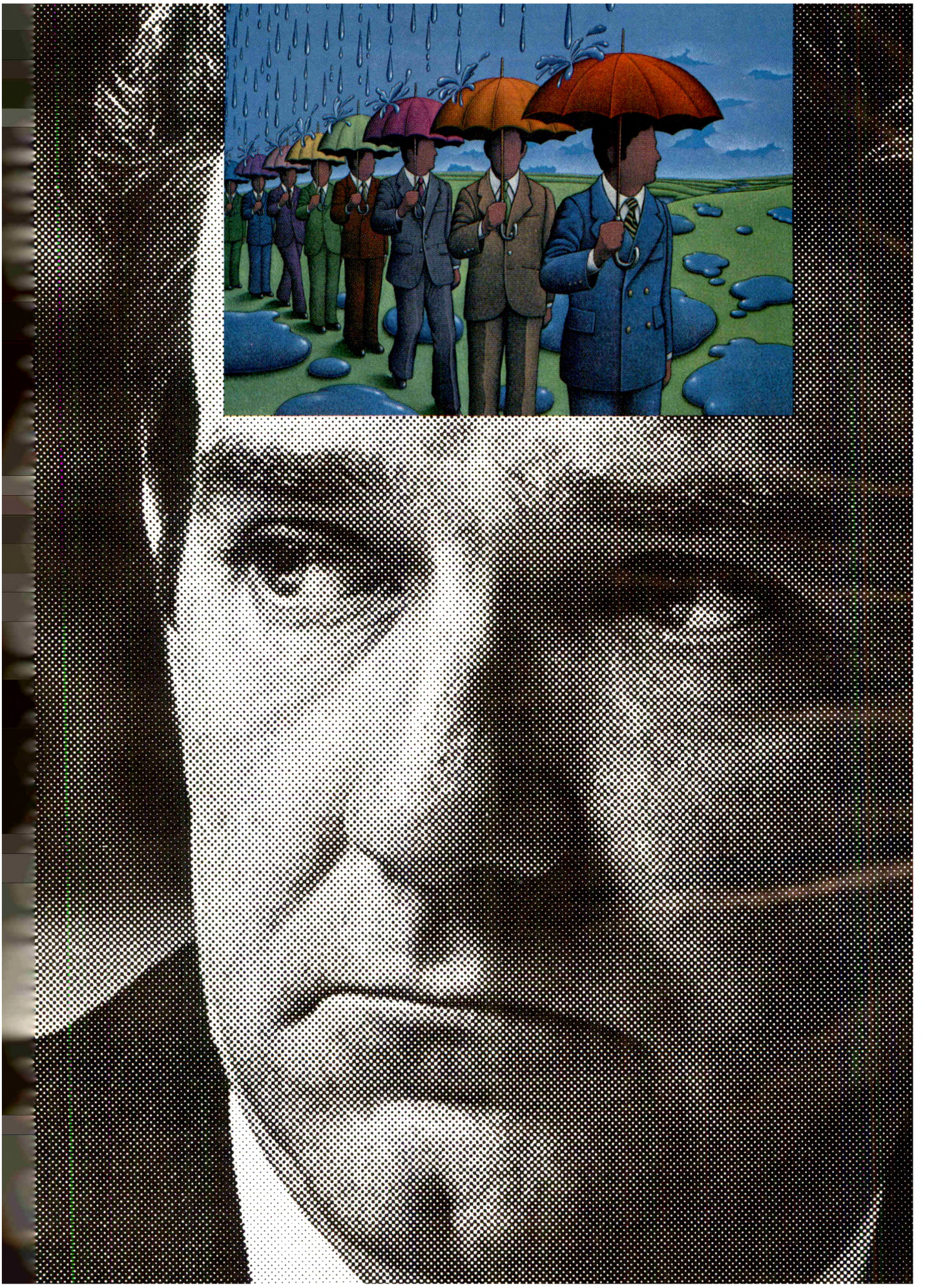
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In early Parkinsonism, tremor and rigidity of the upper extremities are emotionally debilitating as capacity to write or for self-care are reduced. Start AKINETON early to minimize or relieve symptoms, improve function.

WARNINGS, PRECAUTIONS, ADVERSE REACTIONS: Isolated instances of mental confusion, euphoria, agitation and disturbed behavior have been reported in susceptible patients. Use with caution in manifest glaucoma, prostatism and cardiac arrhythmia. Dry mouth, blurred vision and drowsiness appear infrequently. If gastric irritation occurs, it may be avoided by administering during or after meals. With parenteral administration, mild transient postural hypotension may be evidenced. The only known contraindication is sensitivity to Akineton (biperiden.) SUPPLIED: Tablets—2 mg. (bisected) Akineton HCl.

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Into each life some rain must fall but George Harris expects a downpour every day.

Anxiety can be a normal response to a stressful situation. But when inappropriate anxiety becomes a way of life, medication is often indicated.

For the patient suffering from chronic neurotic anxiety, 'Stelazine' offers convenient b.i.d. dosage with no danger of habituation. And, since 'Stelazine' usually acts without sedation, people like George Harris can continue functioning while under treatment.

Stelazine®

brand of

trifluoperazine HCl

Tablets:
1 mg., 2 mg.,
5 mg., 10 mg.

in chronic neurotic anxiety*

*'Stelazine' has been evaluated as possibly effective for this indication. See Brief Summary.

Before prescribing, see complete prescribing information, including dosage and symptoms and treatment of overdosage, in SK&F literature or *PDR*.

* **Indications**

Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: For the management of the manifestations of psychotic disorders.

Possibly effective: To control excessive anxiety, tension and agitation as seen in neuroses or associated with somatic conditions.

Final classification of the less-than-effective indications requires further investigation.

Contraindications: Comatose or greatly depressed states due to C.N.S. depressants; blood dyscrasias; bone marrow depression; liver damage.

Warnings: Caution patients about activities requiring alertness (e.g., operating vehicles or machinery), especially during the first few days' therapy.

Use in pregnancy only when necessary for patient's welfare.

Precautions: Use cautiously in angina. Avoid high doses and parenteral administration when cardiovascular system is impaired. Antiemetic effect may mask signs of toxic drug overdosage or physical disorders. Additive effect is possible with other C.N.S. depressants. Prolonged administration of high doses may result in cumulative effects with severe C.N.S. or vasomotor symptoms. If retinal changes occur, discontinue drug. Agranulocytosis, thrombocytopenia, pancytopenia, anemia, cholestatic jaundice, liver damage have been reported.

Adverse Reactions: Drowsiness, dizziness, skin reactions, rash, dry mouth, insomnia, amenorrhea, fatigue, muscular weakness, anorexia, lactation, blurred vision. Neuromuscular (extrapyramidal) reactions: motor restlessness, dystonias, pseudoparkinsonism, persistent tardive dyskinesia.

Other adverse reactions reported with Stelazine (trifluoperazine HCl, SK&F) or other phenothiazines: Some adverse effects are more frequent or intense in specific disorders (e.g., mitral insufficiency or pheochromocytoma).

Grand mal convulsions; altered cerebrospinal fluid proteins; cerebral edema; prolongation and intensification of the action of C.N.S. depressants, atropine, heat, and organophosphorus insecticides; nasal congestion, headache, nausea, constipation, obstipation, adynamic ileus, inhibition of ejaculation; reactivation of psychotic processes, catatonic-like states; hypotension (sometimes fatal); cardiac arrest; leukopenia, eosinophilia, pancytopenia, agranulocytosis, thrombocytopenic purpura; jaundice, biliary stasis; menstrual irregularities, galactorrhea, gynecomastia, false positive pregnancy tests; photosensitivity, itching, erythema, urticaria, eczema up to exfoliative dermatitis; asthma, laryngeal edema, angioneurotic edema, anaphylactoid reactions; peripheral edema; reversed epinephrine effect; hyperpyrexia; a systemic lupus erythematosus-like syndrome; pigmentary retinopathy; with prolonged administration of substantial doses, skin pigmentation, epithelial keratopathy, and lenticular and corneal deposits. EKG changes have been reported, but relationship to myocardial damage is not confirmed. Discontinue long-term, high-dose therapy gradually. NOTE: Sudden death in patients taking phenothiazines (apparently due to cardiac arrest or asphyxia due to failure of cough reflex) has been reported, but no causal relationship has been established.

Supplied: Tablets, 1 mg., 2 mg., 5 mg. and 10 mg., in bottles of 100; Injection, 2 mg./ml.; and Concentrate, 10 mg./ml.

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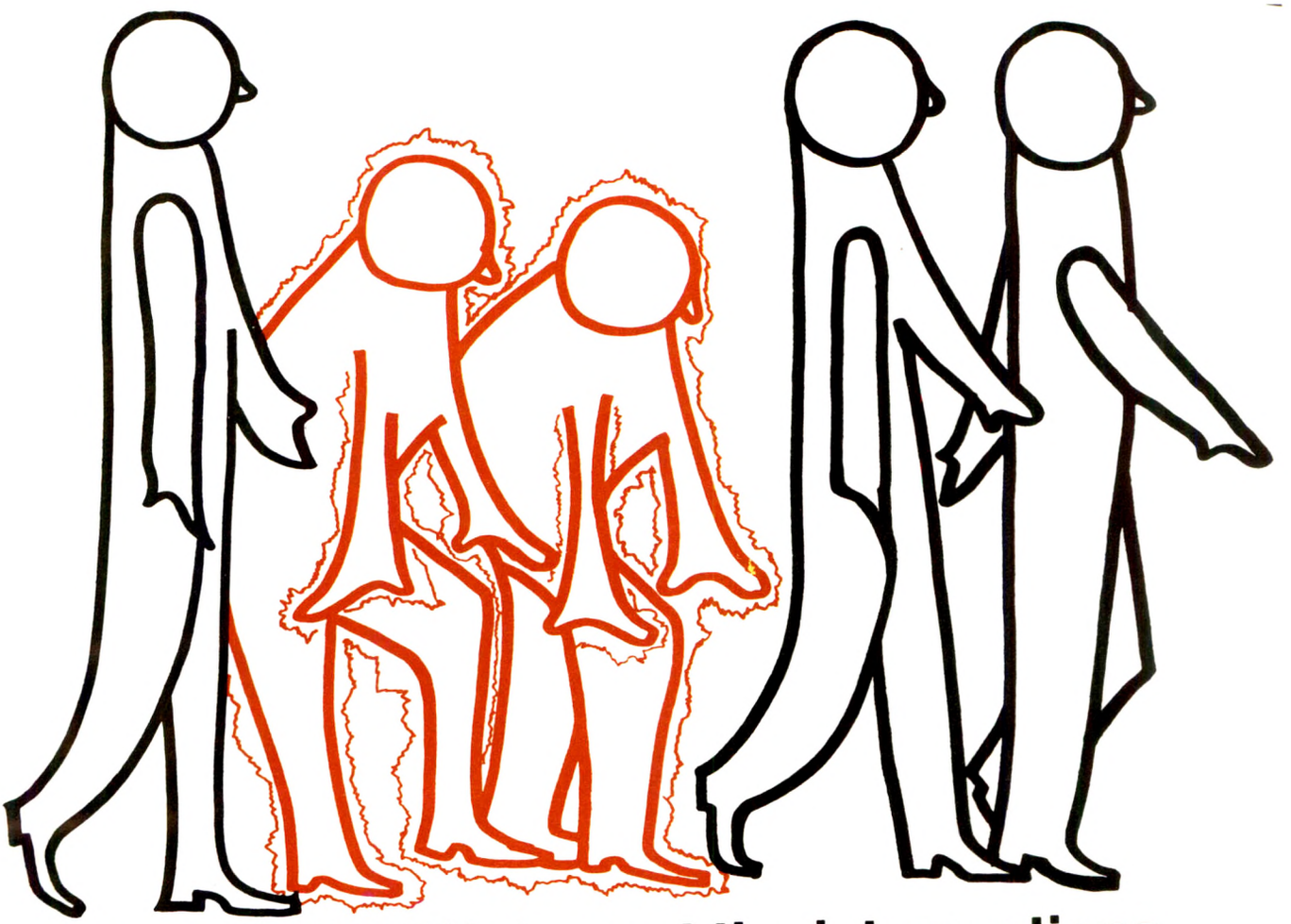
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Based on a review of this drug in sustained release form by the National Academy of Sciences-National Research Council and/or other information, FDA has classified the indications as follows: Probably effective as an adjunct in the therapy of all forms of parkinsonism (postencephalitic, arteriosclerotic, and idiopathic) and for the use in the prevention or control of extrapyramidal disorders due to central nervous system drugs such as reserpine and phenothiazines.

Precautions: Patients with cardiac, liver or kidney disorders or with hypertension should be maintained under close observation. In long-term therapy, take care to avoid allergic and other untoward reactions. Use with caution in patients with glaucoma, obstructive disease of the gastrointestinal or genitourinary tracts and in elderly males with possible prostatic hypertrophy. Geriatric patients require strict dosage regulation. Incipient glaucoma may be precipitated.

Adverse Reactions: Such effects as dryness of mouth, blurring of vision, dizziness, nausea or nervousness will be experienced by 30 to 50 per cent of patients. (These tend to lessen and can often be controlled by adjusting dosage.) Isolated instances of suppurative parotitis, skin rashes, dilatation of the colon, paralytic ileus, delusions, hallucinations and paranoia (1 doubtful case) have been reported. Patients with arteriosclerosis or with a history of idiosyncrasy to drugs may exhibit mental confusion, agitation, disturbed behavior, or nausea and vomiting. If a severe reaction occurs, discontinue drug for a few days, then resume at lower dosage. Psychiatric disturbances can result from overdosage to sustain euphoria. Side effects of any atropine-like drugs include constipation, drowsiness, urinary hesitancy or retention, tachycardia, dilation of the pupil, increased intraocular tension, weakness, vomiting and headache.

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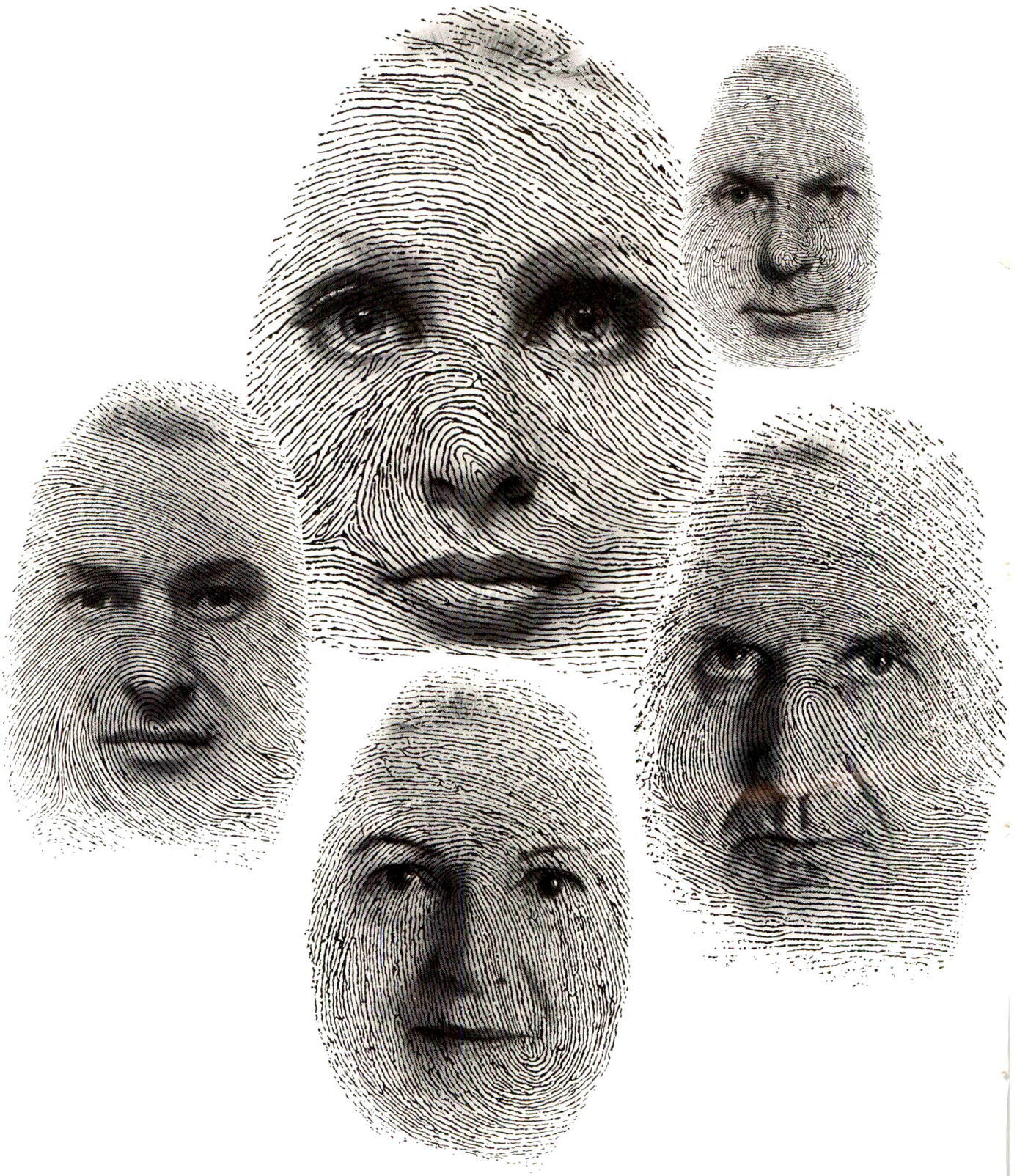
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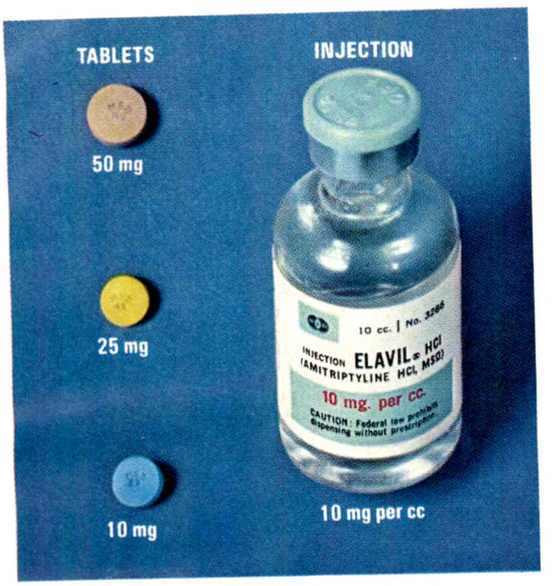
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NOTE: Not recommended during the acute recovery phase following myocardial infarction. Patients with cardiovascular disorders should be watched closely; arrhythmias, sinus tachycardia, and prolongation of the conduction time have been reported, particularly with high doses; myocardial infarction and stroke have been reported with drugs of this class. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. Concurrent electroshock therapy may increase the hazards of therapy; such treatment should be limited to patients for whom it is essential. Discontinue the drug several days before elective surgery if possible. Should not be given to patients who have received an MAOI within two weeks.

Contraindications: Known hypersensitivity. Should not be given concomitantly with a monoamine oxidase inhibitor or within at least 14 days following the discontinuance of a monoamine oxidase inhibitor since hyperpyretic crises, severe convulsions, and deaths have occurred. When used to replace a monoamine oxidase inhibitor, initiate dosage of amitriptyline HCl cautiously with gradual increase in dosage until optimum response is achieved. Not recommended during the acute recovery phase following myocardial infarction or for patients under 12 years of age.

Warnings: May block the antihypertensive action of guanethidine or similarly acting compounds. Should be used with caution in patients with a history of seizures or urinary retention, or with angle-closure glaucoma or increased intraocular pressure. Patients with cardiovascular disorders should be watched closely; arrhythmias, sinus tachycardia, and prolongation of the conduction time have been reported, particularly with high doses; myocardial infarction and stroke have been reported with drugs of this class. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. May impair mental and/or physical abilities required for performance of hazardous tasks, such as operating machinery or driving a motor vehicle. Safe use during pregnancy and lactation has not been established; in pregnant patients, nursing mothers, or women who may become pregnant, weigh possible benefits against possible hazards to mother and child.

Precautions: Schizophrenic patients may develop increased symptoms of psychosis; patients with paranoid symptomatology may have an exaggeration of such symptoms; manic depressive patients may experience a shift to the manic phase. In these circumstances, the dose of amitriptyline HCl may be reduced or a major tranquilizer, such as perphenazine, may be administered concurrently.
When given with anticholinergic agents or sympathomimetic drugs, close supervision and careful adjustment of dosages are required. Use cautiously in patients receiving large doses of ethchlorvynol, since transient delirium has been reported on concurrent administration. May enhance the response to alcohol and the effects of barbiturates and other CNS depressants. The possibility of suicide in depressed patients remains during treatment and until significant remission occurs; this type of patient should not have easy access to large quantities of the drug. Concurrent electroshock therapy may increase the hazards associated with such therapy; such treatment should be limited to patients for whom it is essential. When possible, discontinue the drug several days before elective surgery. Both elevation and lowering of blood sugar levels have been reported.

Adverse Reactions: *Note:* Included in this listing are a few adverse reactions not reported with this specific drug. However, pharmacological similarities among the tricyclic antidepressant drugs require that each reaction be considered when amitriptyline is administered. *Cardiovascular:* Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus. *Anticholinergic:* Dry mouth, blurred vision, disturbance of accommodation, constipation, paralytic ileus, urinary retention, dilatation of urinary tract. *Allergic:* Skin rash, urticaria, photosensitization, edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis, leukopenia, eosinophilia, purpura, thrombocytopenia. *Gastrointestinal:* Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, parotid swelling, black tongue. *Endocrine:* Testicular swelling and gynecomastia in the male, breast enlargement and galactorrhea in the female, increased or decreased libido, elevation and lowering of blood sugar levels. *Other:* Dizziness, weakness, fatigue, headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, drowsiness, jaundice, alopecia. *Withdrawal Symptoms:* Abrupt cessation of treatment after prolonged administration may produce nausea, headache, and malaise; these are not indicative of addiction.

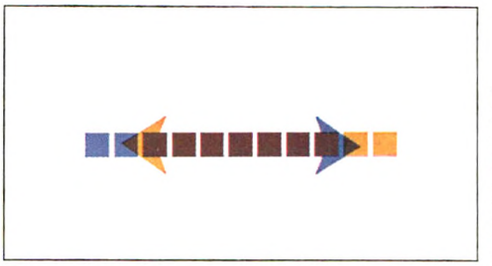
Overdosage: The intravenous administration of 1–3 mg of physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning.

How Supplied: Tablets containing 10 mg and 25 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100, 1000, and 5000; tablets containing 50 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100 and 1000; for intramuscular use, in 10-ml vials containing per ml: 10 mg amitriptyline HCl, 44 mg dextrose, 1.5 mg methylparaben and 0.2 mg propylparaben as preservatives, and water for injection q.s. 1 ml.

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To reduce obstructive anxiety during therapy, expediting verbal communication



Verbal communication may be prevented or obstructed during psychotherapy by a buildup of extreme anxiety in the psychoneurotic patient as sensitive material is probed. In turn, the therapeutic impasse can generate further patient anxiety and tension. In such cases, the reduction of intense anxiety with the help of Librium (chlordiazepoxide HCl) usually facilitates verbal exchange, thereby permitting psychotherapy to proceed. Librium is prescribed by psychiatrists as adjunctive therapy because it has been found to make anxiety-blocked patients more amenable to psychotherapy. Moreover, for patients incapacitated by excessive anxiety, the action of Librium (chlordiazepoxide HCl) often favors restored performance.

Many psychiatrists have found that

Before prescribing, please consult complete product information, a summary of which follows:

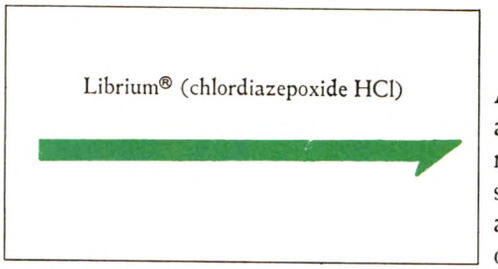
Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement,

Librium® (chlordiazepoxide HCl) the calming catalyst



Librium 25 mg, given *t.i.d.* or *q.i.d.*, is particularly suitable for the relief of severe anxiety. An additional advantage is that, after more than 12 years of wide clinical use, Librium continues to demonstrate an impressive record of safety. In general use, the most common side effects reported have been drowsiness, ataxia and confusion, particularly in the elderly and debilitated.

As with all CNS-acting agents, patients receiving Librium should be cautioned against hazardous occupations requiring complete mental alertness, such as operating machinery or driving a motor vehicle. When excessive anxiety has been reduced to appropriate levels, Librium therapy should be discontinued.

for severe anxiety
Librium® 25 mg (chlordiazepoxide HCl)
1 capsule t.i.d./q.i.d.

stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

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For graduate student
John R., lying down
to sleep was a real
eye-opener.
11
12
1



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John R. volunteered to participate...along ith nine other confirmed insomniacs...in a sleep udy[1] of experimental design, single blind, to evalu-e Quāālude-300 against a placebo. Sequentially, here were three placebo nights, followed by three rug nights, followed by four placebo nights. EEG cordings were obtained continuously from 2300 to 600 hours. He returned for a second period of 10 ays three weeks later.

Goldstein, *et al.*,[2] reported that two statis-cally significant benefits of Quāālude-300 were pparent in this particular study.

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Brief Summary of Prescribing Information

Indications: Sleep. Daytime sedation.

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Overdosage: Acute overdosage may result in delirium and coma, with restlessness and hypertonia, progressing to convulsions. Evacuate gastric contents, maintain adequate ventilation and support blood pressure, if necessary. Dialysis may be helpful. Analeptics are contraindicated. Succinylcholine accompanied by assisted respiration has been proposed for prolonged convulsions. Overdoses of methaqualone appear to be less often associated with cardiac or respiratory depression than are overdoses of oral barbiturates, but shock and respiratory arrest may occasionally occur.

Contraindications: Contraindicated in women who are or may become pregnant; or patients with known hypersensitivity.

Warnings: Take hypnotic dose only at bedtime. Not recommended in children. Warn patient on Quāālude® (methaqualone) against driving a car or operating dangerous machinery. Care needed when administered with other sedatives, analgesic or psychotropic drugs or alcohol because of possible additive effects. Pending longer clinical experience, Quāālude should not be used continuously for periods exceeding three months. *Psychological dependence* occasionally occurs. *Physical dependence* rarely reported. However, caution needed with addiction-prone patients.

Precautions: Use with caution and prescribe small quantities in patients with anxiety states where impending depression or suicidal tendencies exist. Give in reduced doses, if at all, in patients with impaired hepatic function.

Adverse Reactions: *Neuropsychiatric:* headache, hangover, fatigue, dizziness, torpor, transient paresthesia of the extremities. An occasional patient has experienced restlessness or anxiety. *Hematologic:* aplastic anemia possibly related to methaqualone has been very rarely reported. *Gastrointestinal:* dry mouth, anorexia, nausea, emesis, epigastric discomfort, diarrhea. *Dermatologic:* diaphoresis, bromhidrosis, exanthema. Urticaria has been particularly well documented.

Supplied: Quāālude-150 (150 mg. white, scored tablets). Quāālude-300 (300 mg. white, scored tablets).

Consult complete literature before prescribing.

1. A Comparative Study of the Effects of Methaqualone...on Sleep in Male Chronic Insomniacs, Goldstein, L. *et al.: J. Clin. Pharmacol. 10:* 258-268, 1970.
2. An Analysis of Effects of Methaqualone...on Sleep in Insomniac Subjects, Goldstein, L. *et al.: Res. Communications in Chem. Path. and Pharmacol. 2:* 927-933, 1971.

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Summary of Directions for Use

Indications: For the treatment of such symptoms as moderate to severe agitation, anxiety and tension, assaultiveness, delusions, hallucinations, hostility, and hyperactivity when they are manifestations of psychosis including schizophrenia, the manic type of manic depressive illness, or psychotic reactions associated with organic brain syndromes or mental retardation. For the control of tics and vocal utterances of Gilles de la Tourette's Syndrome.

Contraindications: HALDOL (haloperidol) is contraindicated in patients who are severely depressed, comatose, have CNS depression due to alcohol or other centrally-acting depressants, have Parkinson's disease or are hypersensitive to this drug.

Warnings: ***Usage in Pregnancy***—Safe use of HALDOL (haloperidol) in pregnancy and lactation has not been established; therefore, its use in pregnancy, in nursing mothers, or in women of childbearing potential requires that the possible benefits of the drug be weighed against the potential hazards. A case of phocomelia in an infant whose mother received haloperidol along with a number of other medications during the first trimester of pregnancy has been reported (a causal relationship was not established in this case). Animals receiving 2 to 20 times the maximum human dose of HALDOL orally and/or parenterally showed increased incidence of resorption, reduced fertility, delayed delivery, dose-related pup mortality (presumably due to lack of maternal care reflecting CNS depression).

Usage in Children—Safety and effectiveness in children have not been established; therefore, this drug is not recommended for use in the pediatric age group.

General: Cases of bronchopneumonia, some fatal, have followed the use of major tranquilizers, including haloperidol. It has been postulated that lethargy and decreased sensation of thirst may lead to dehydration, hemoconcentration and reduced pulmonary ventilation. If these signs and symptoms appear, especially in the elderly, the physician should institute remedial therapy promptly. Although not reported with HALDOL (haloperidol), decreased serum cholesterol and/or cutaneous and ocular changes have been reported in patients receiving chemically-related drugs. HALDOL may impair the mental and/or physical abilities required for the performance of hazardous tasks such as operating machinery or driving a motor vehicle. The ambulatory patient should be warned accordingly. The use of alcohol should be avoided due to possible additive effects and hypotension.

Precautions: HALDOL (haloperidol) should be administered cautiously to patients: (1)—with severe cardiovascular disorders, because of the possibility of transient hypotension and/or precipitation of anginal pain. Should hypotension occur and a vasopressor be required, *epinephrine should not be used* since HALDOL may block its vasopressor activity and paradoxical further lowering of blood pressure may occur. (2)—receiving anticonvulsant medication, because HALDOL may lower the convulsive threshold, although it will *not* increase the effects of anticonvulsant medication. Adequate anticonvulsant therapy should be maintained concomitantly. (3)—with known allergies, or with a history of allergic reactions to drugs. (4)—receiving anticoagulants, since an isolated instance of interference occurred with the effects of one anticoagulant (phenindione).

If concomitant anti-Parkinson medication is required, it may have to be continued after haloperidol is discontinued because of the difference in excretion rates. If both are discontinued simultaneously, extrapyramidal symptoms may occur. Intraocular pressure may increase when anticholinergic drugs, including anti-Parkinson agents, are administered concomitantly with HALDOL. When HALDOL is used to control mania in cyclic disorders there may be a rapid mood swing to depression.

Adverse Reactions: ***CNS Effects:*** *Extrapyramidal Reactions*—Neuromuscular (extrapyramidal) reactions have been reported frequently, often during the first few days of treatment. Generally they involved Parkinson-like symptoms which usually were mild to moderately severe and reversible. Other types of neuromuscular reactions (motor restlessness, dystonia, akathisia, hyperreflexia, opisthotonos, oculogyric crises) have been reported far less frequently, but were often more severe. Severe extrapyramidal reactions have been reported at relatively low doses. Generally extrapyramidal symptoms are dose related since they occur at relatively high doses and disappear or become less severe when the dose is reduced. Administration of anti-Parkinson drugs may be required for control of such reactions. Persistent extrapyramidal reactions have been reported and the drug may have to be discontinued in such cases. *Other CNS Effects*—Insomnia, restlessness, anxiety, euphoria, agitation, drowsiness, depression, lethargy, headache, confusion, vertigo, grand mal seizures, and exacerbation of psychotic symptoms including hallucinations. ***Cardiovascular Effects:*** Tachycardia and hypotension. ***Hematologic Effects:*** Reports have appeared of mild and usually transient leukopenia and leukocytosis, minimal decreases in red blood cell counts, anemia, or a tendency toward lymphomonocytosis. Agranulocytosis has rarely been reported and then only in association with other medication. ***Liver Effects:*** Impaired liver function and/or jaundice have been reported, although a causal relationship has not been established. ***Dermatologic Reactions:*** Maculopapular and acneiform skin reactions and isolated cases of photosensitivity and loss of hair. ***Endocrine Disorders:*** Lactation, breast engorgement, mastalgia, menstrual irregularities, gynecomastia, impotence, increased libido, hyperglycemia and hypoglycemia. ***Gastrointestinal Effects:*** Anorexia, constipation, diarrhea, hypersalivation, dyspepsia, nausea and vomiting. ***Autonomic Reactions:*** Dry mouth, blurred vision, urinary retention and diaphoresis. ***Respiratory Effects:*** Laryngospasm, bronchospasm and increased depth of respiration.

Complete dosage information available in insert which accompanies each package (or on request).

The use of the injectable form is intended for the acutely agitated psychotic patient with moderately severe to very severe symptoms.

IMPORTANT: Full directions for use should be read before HALDOL (haloperidol) is administered or prescribed. 11/72

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Indications

Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: For the management of manifestations of psychotic disorders.

Probably effective: For control of the manifestations of manic-depressive illness (manic phase). For the control of moderate to severe agitation, hyperactivity or aggressiveness in disturbed children.

Possibly effective: For control of excessive anxiety, tension and agitation as seen in neuroses.

Final classification of the less-than-effective indications requires further investigation.

Contraindications: Comatose states, presence of large amounts of C.N.S. depressants, or bone marrow depression.

Warnings: Avoid using in patients hypersensitive (e.g., blood dyscrasias, jaundice) to any phenothiazine. Caution patients about activities requiring alertness (e.g., operating vehicles or machinery) especially during the first few days' therapy. Avoid concomitant use with alcohol. May counteract antihypertensive effect of guanethidine and related compounds.

Use in pregnancy only when essential. There are reported instances of jaundice or prolonged extrapyramidal signs in newborn whose mothers had received chlorpromazine.

Precautions: Use cautiously in persons with cardiovascular, liver, or chronic respiratory disease, or with acute respiratory infections. Due to cough reflex suppression, aspiration of vomitus is possible. May prolong or intensify the action of C.N.S. depressants, organophosphorus insecticides, heat, atropine and related drugs. (Reduce dosage of concomitant C.N.S. depressants.) Anticonvulsant action of barbiturates is not intensified. Antiemetic effect may mask signs of toxic drug overdosage or physical disorders. Discontinue high-dose, long-term therapy gradually.

Patients on long-term therapy, especially high doses, should be evaluated periodically for possible adjustment or discontinuance of drug therapy.

Adverse Reactions: Drowsiness, cholestatic jaundice, agranulocytosis, eosinophilia, leukopenia, hemolytic anemia, thrombocytopenic purpura and pancytopenia; postural hypotension, tachycardia, fainting, dizziness and, occasionally, a shock-like condition; reversal of epinephrine effects; EKG changes have been reported, but relationship to myocardial damage is not confirmed; neuromuscular (extrapyramidal) reactions; pseudoparkinsonism, motor restlessness, dystonias, persistent tardive dyskinesia, hyperreflexia in the newborn; psychotic symptoms, catatonic-like states, cerebral edema; convulsive seizures; abnormality of the cerebrospinal fluid proteins; urticarial reactions and photosensitivity, exfoliative dermatitis, contact dermatitis; lactation and breast engorgement (in females on large doses), false positive pregnancy tests, amenorrhea, gynecomastia; hyperglycemia, hypoglycemia, glycosuria; dry mouth, nasal congestion, constipation, adynamic ileus, urinary retention, miosis, mydriasis; after prolonged substantial doses, skin pigmentation, epithelial keratopathy, lenticular and corneal deposits and pigmentary retinopathy, visual impairment; mild fever (after large I.M. dosage); hyperpyrexia; increased appetite and weight; a systemic lupus erythematosus-like syndrome; peripheral edema.

NOTE: Sudden death in patients taking phenothiazines (apparently due to cardiac arrest or asphyxia due to failure of cough reflex) has been reported, but no causal relationship has been established.

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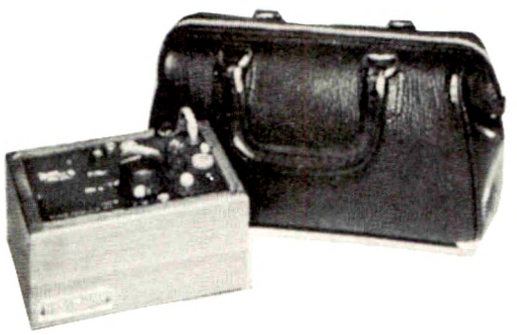
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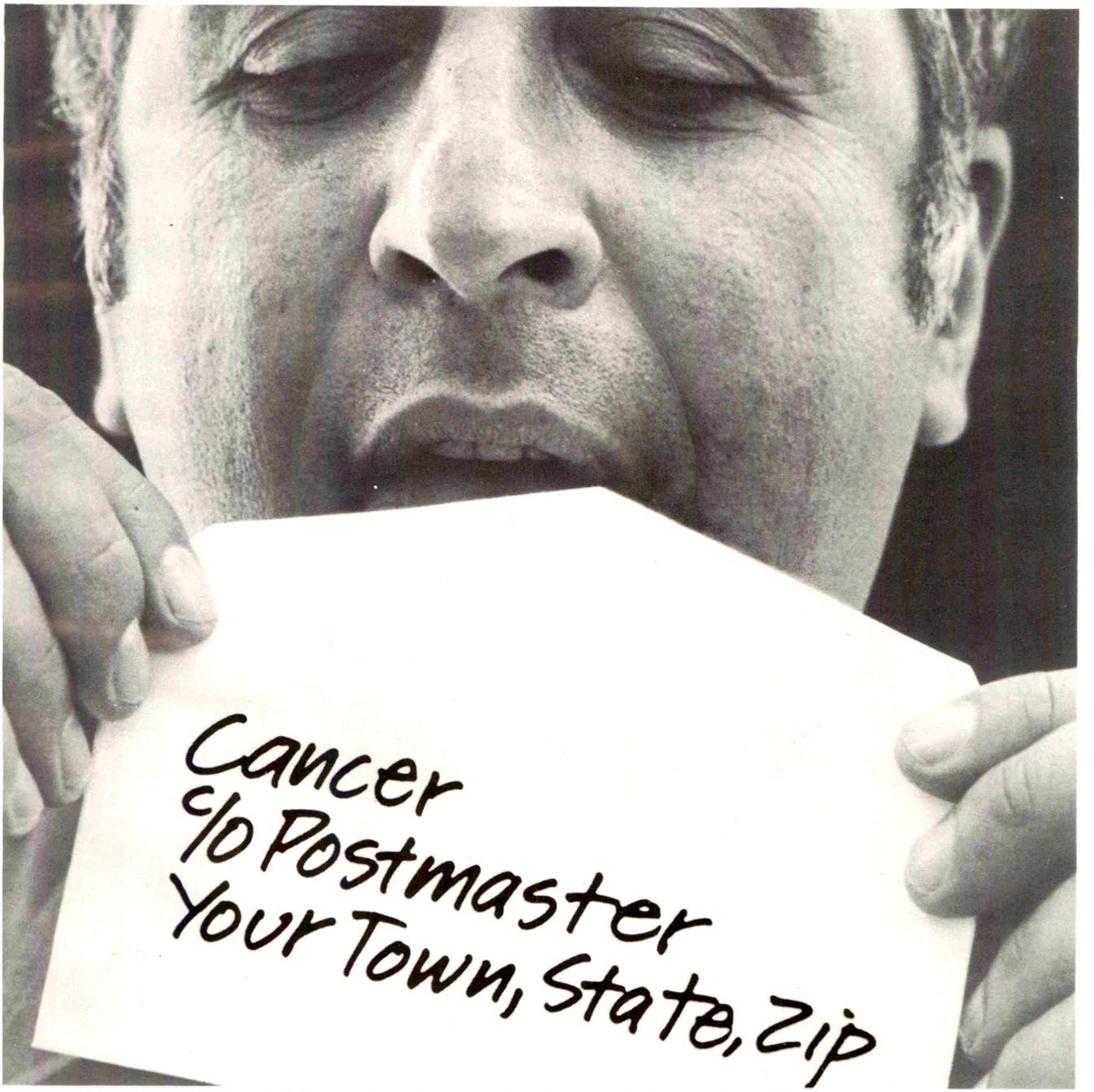
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AUTHORS: Raymond Glasscote, Jerome H. Jaffe, James N. Sussex, John Ball, Leon Brill

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AUTHORS: Raymond Glasscote, Michael Fishman, Meyer Sonis

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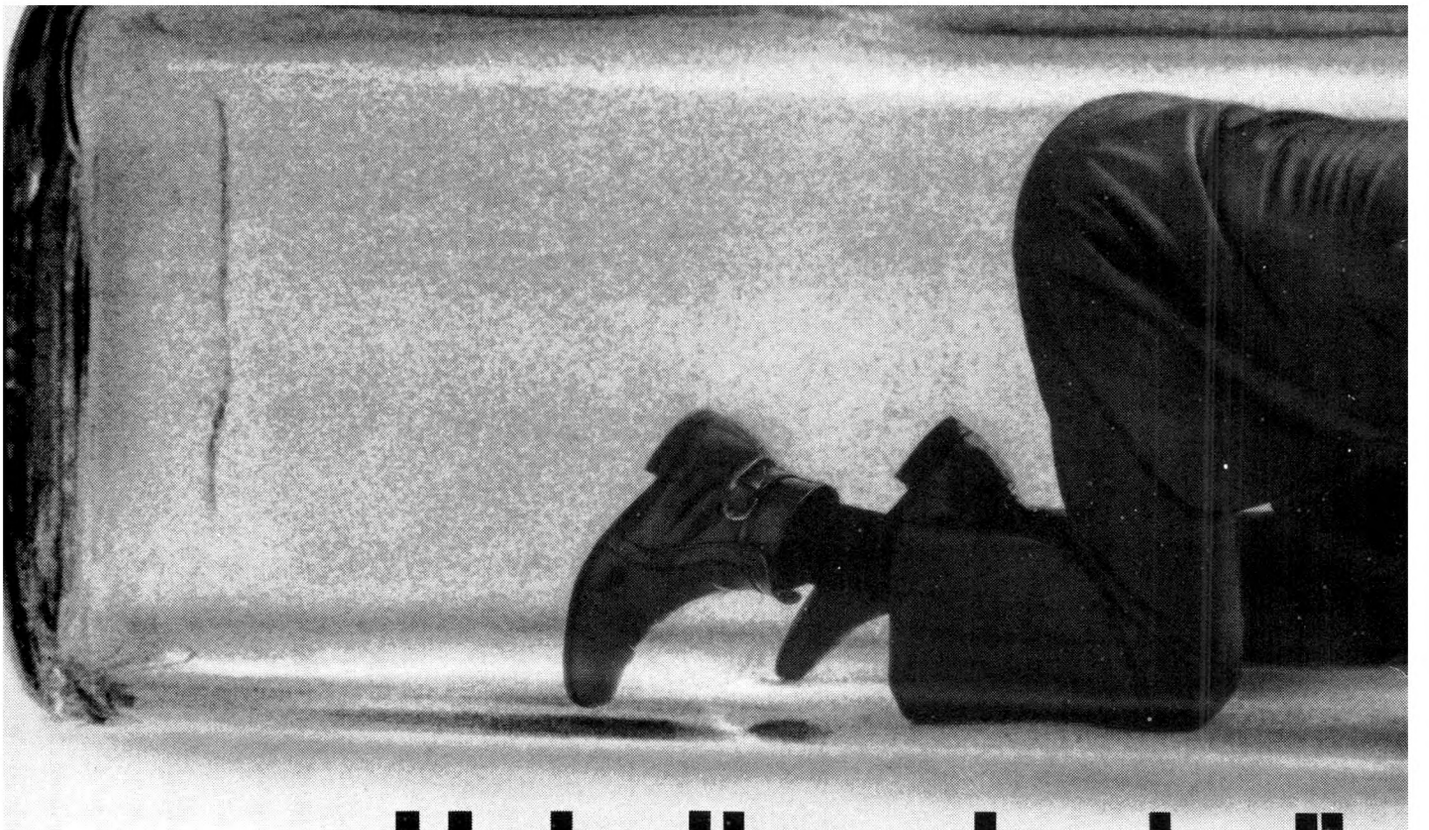
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While the etiology of alcoholism remains complex and largely undetermined, the essential therapeutic measure is to stop the alcoholic from drinking. ANTABUSE (disulfiram) can help you help the motivated alcoholic get "out of the bottle." If the patient has a sincere desire to stop drinking, but the usual "faltering will," ANTABUSE can help to shore up his resolve.

The first step is his agreement to accept supportive drug therapy with ANTABUSE to deter him from drinking. The second step is the decision the patient must make each day to take his alcohol-deterrent medicine. The third step is the maintenance of sobriety with ANTABUSE (disulfiram), allowing him to cooperate in other aspects of a total treatment plan.

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ANTABUSE has been used effectively as a medical adjunct in the control of alcoholism for more than 20 years. Unlike tranquilizers and sedatives, it is nonhabituating, so that there is no chance of cross addiction. It is important, however, to give the patient a clear and detailed description of the effects of ingesting alcohol after he has taken ANTABUSE (even up to 14 days after the last dose of ANTABUSE)...and how this becomes a psychologic benefit in that it deters drinking and helps to enforce sobriety.

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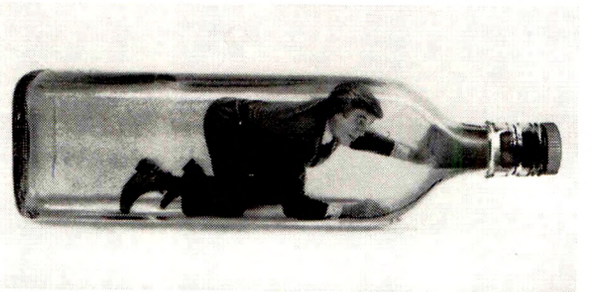
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(See next page of advertisement for Brief Summary.)

BRIEF SUMMARY
(For full prescribing information, see package circular.)

ANTABUSE®
(DISULFIRAM)
In Alcoholism



INDICATION: ANTABUSE is an aid in the management of selected chronic alcoholic patients who want to remain in a state of enforced sobriety so that supportive and psychotherapeutic treatment may be applied to best advantage. (Used alone, without proper motivation and without supportive therapy, ANTABUSE is not a cure for alcoholism, and it is unlikely that it will have more than a brief effect on the drinking pattern of the chronic alcoholic.)

CONTRAINDICATIONS: Patients who are receiving or have recently received metronidazole, paraldehyde, alcohol, or alcohol-containing preparations, e.g. cough syrups, tonics, and the like, should not be given ANTABUSE.

ANTABUSE is contraindicated in the presence of severe myocardial disease or coronary occlusion, psychoses, or hypersensitivity.

WARNINGS

ANTABUSE should never be administered to a patient when he is in a state of alcohol intoxication or without his full knowledge.
The physician should instruct relatives accordingly.

The patient must be fully informed of the ANTABUSE-alcohol reaction. He must be strongly cautioned against surreptitious drinking while taking the drug, and he must be fully aware of possible consequences. He should be warned to avoid alcohol in disguised form, *i.e.* in sauces, vinegars, cough mixtures, and even aftershave lotions and back rubs. He should also be warned that reactions may occur with alcohol up to 14 days after ingesting ANTABUSE.

THE ANTABUSE-ALCOHOL REACTION: ANTABUSE plus alcohol, even small amounts, produces flushing, throbbing in head and neck, throbbing headache, respiratory difficulty, nausea, copious vomiting, sweating, thirst, chest pain, palpitation, dyspnea, hyperventilation, tachycardia, hypotension, syncope, marked uneasiness, weakness, vertigo, blurred vision, and confusion. In severe reactions there may be respiratory depression, cardiovascular collapse, arrhythmias, myocardial infarction, acute congestive heart failure, unconsciousness, convulsions, and death.

The intensity of the reaction varies with each individual, but is generally proportional to the amounts of ANTABUSE (disulfiram) and alcohol ingested. Mild reactions may occur in the sensitive individual when the blood alcohol concentration is increased to as little as 5 to 10 mg. per 100 cc. Symptoms are fully developed at 50 mg. per 100 cc., and unconsciousness usually results when the blood alcohol level reaches 125 to 150 mg.

The duration of the reaction varies from 30 to 60 minutes to several hours in the more severe cases, or as long as there is alcohol in the blood.

DRUG INTERACTIONS: Disulfiram appears to decrease the rate at which certain drugs are metabolized and so may increase the blood levels and the possibility of clinical toxicity of drugs given concomitantly.

Disulfiram should be used with caution in those patients receiving diphenylhydantoin and its congeners, since toxic levels of these antiepileptic agents have been reported during concomitant disulfiram therapy.

It may be necessary to adjust the dosage of oral anticoagulants upon beginning or stopping disulfiram, since disulfiram may prolong prothrombin time.

Patients taking isoniazid when disulfiram is given should be observed for the appearance of unsteady gait or marked changes in mental status and the disulfiram discontinued if such signs appear.

CONCOMITANT CONDITIONS: Because of the possibility of an accidental ANTABUSE-alcohol reaction, ANTABUSE (disulfiram) should be used with extreme caution in patients with any of the following conditions: diabetes mellitus, hypothyroidism, epilepsy, cerebral damage, chronic and acute nephritis, hepatic cirrhosis or insufficiency.

USAGE IN PREGNANCY: The safe use of this drug in pregnancy has not been established. Therefore, ANTABUSE should be used during pregnancy only when, in the judgment of the physician, the probable benefits outweigh the possible risks.

PRECAUTIONS: It is suggested that every patient under treatment carry an Identification Card, stating that he is receiving ANTABUSE and describing the symptoms most likely to occur as a result of the ANTABUSE-alcohol reaction. In addition, this card should indicate the physician or institution to be contacted in emergency. (Cards may be obtained from Ayerst Laboratories upon request.)

Alcoholism may accompany or be followed by dependence on narcotics or sedatives. Barbiturates have been administered concurrently with ANTABUSE (disulfiram) without untoward effects, but the possibility of initiating a new abuse should be considered.

Base line and follow-up transaminase tests (10-14 days) are suggested to detect any hepatic dysfunction that may result with ANTABUSE therapy.

ADVERSE REACTIONS: (See Contraindications, Warnings, and Precautions.)

Occasional skin eruptions are, as a rule, readily controlled by concomitant administration of an antihistaminic drug.

In a small number of patients, a transient mild drowsiness, fatigability, impotence, headache, acne-form eruptions, allergic dermatitis, or a metallic or garlic-like aftertaste may be experienced during the first two weeks of therapy. These complaints usually disappear spontaneously with the continuation of therapy or with reduced dosage.

Psychotic reactions have been noted, attributable in most cases to high dosage, combined toxicity (with metronidazole or isoniazid), or to the unmasking of underlying psychoses in patients stressed by the withdrawal of alcohol.

There have been reports of polyneuritis and peripheral neuritis, and rare instances of optic neuritis. One case of cholestatic hepatitis has been reported, but its relationship to ANTABUSE has not been unequivocally established.

DOSAGE AND ADMINISTRATION: ANTABUSE (disulfiram) should never be administered until the patient has abstained from alcohol for at least 12 hours.

INITIAL DOSAGE SCHEDULE: In the first phase of treatment, a maximum of 500 mg. daily is given in a single dose for one to two weeks. Although usually taken in the morning, ANTABUSE may be taken on retiring by patients who experience a sedative effect. Alternatively, to minimize, or eliminate, the sedative effect, dosage may be adjusted downward.

MAINTENANCE REGIMEN: The average maintenance dose is 250 mg. daily (range, 125 to 500 mg.); it should not exceed 500 mg. daily.

NOTE: Occasional patients, while seemingly on adequate maintenance doses of ANTABUSE, report that they are able to drink alcoholic beverages with impunity and without any symptomatology. All appearances to the contrary, such patients must be presumed to be disposing of their tablets in some manner without actually taking them. Until such patients have been observed reliably taking their daily ANTABUSE tablets (preferably crushed and well mixed with liquid), it cannot be concluded that ANTABUSE is ineffective.

DURATION OF THERAPY: The daily, uninterrupted administration of ANTABUSE must be continued until the patient is fully recovered socially and a basis for permanent self-control is established. Depending on the individual patient, maintenance therapy may be required for months or even years.

TRIAL WITH ALCOHOL: During early experience with ANTABUSE, it was thought advisable for each patient to have at least one supervised alcohol-drug reaction. More recently, the test reaction has been largely abandoned. Furthermore, it should never be administered to a patient over 50 years of age. A clear, detailed, and convincing description of the reaction is felt to be sufficient in most cases.

However, where a test reaction is deemed necessary, the suggested procedure is as follows:

After the first one to two weeks' therapy with 500 mg. daily, a drink of 15 cc. (½ oz.) of 100 proof whiskey or equivalent is taken slowly. This test dose of alcoholic beverage may be repeated once only so that the total dose does not exceed 30 cc. (1 oz.) of whiskey. Once a reaction develops, no more alcohol should be consumed. Such tests should be carried out only when the patient is hospitalized, or comparable supervision and facilities, including oxygen, are available.

MANAGEMENT OF ANTABUSE (DISULFIRAM)-ALCOHOL REACTION: In severe reactions, whether caused by an excessive test dose or by the patient's unsupervised ingestion of alcohol, supportive measures to restore blood pressure and treat shock should be instituted. Other recommendations include: oxygen, carbogen (95 per cent oxygen and 5 per cent carbon dioxide), vitamin C intravenously in massive doses (1 Gm.), and ephedrine sulfate. Antihistamines have also been used intravenously. Potassium levels should be monitored particularly in patients on digitalis since hypokaliemia has been reported.

HOW SUPPLIED: No. 809—Each tablet (scored) contains 250 mg. disulfiram, in bottles of 100. No. 810—Each tablet (scored) contains 500 mg. disulfiram, in bottles of 50 and 1,000.

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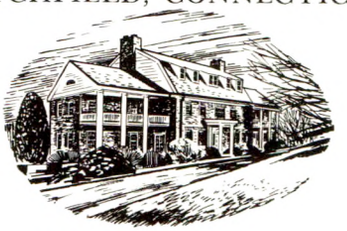
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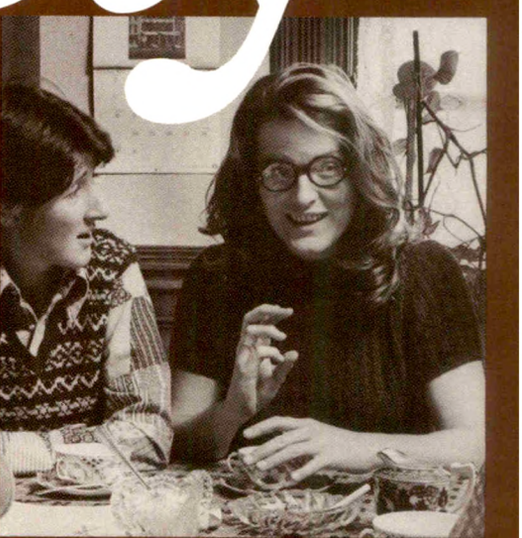
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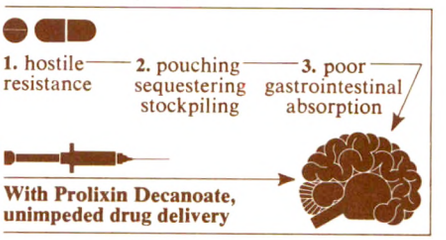
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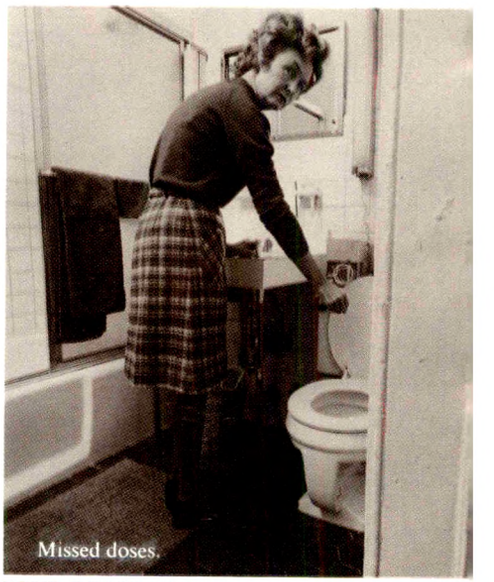
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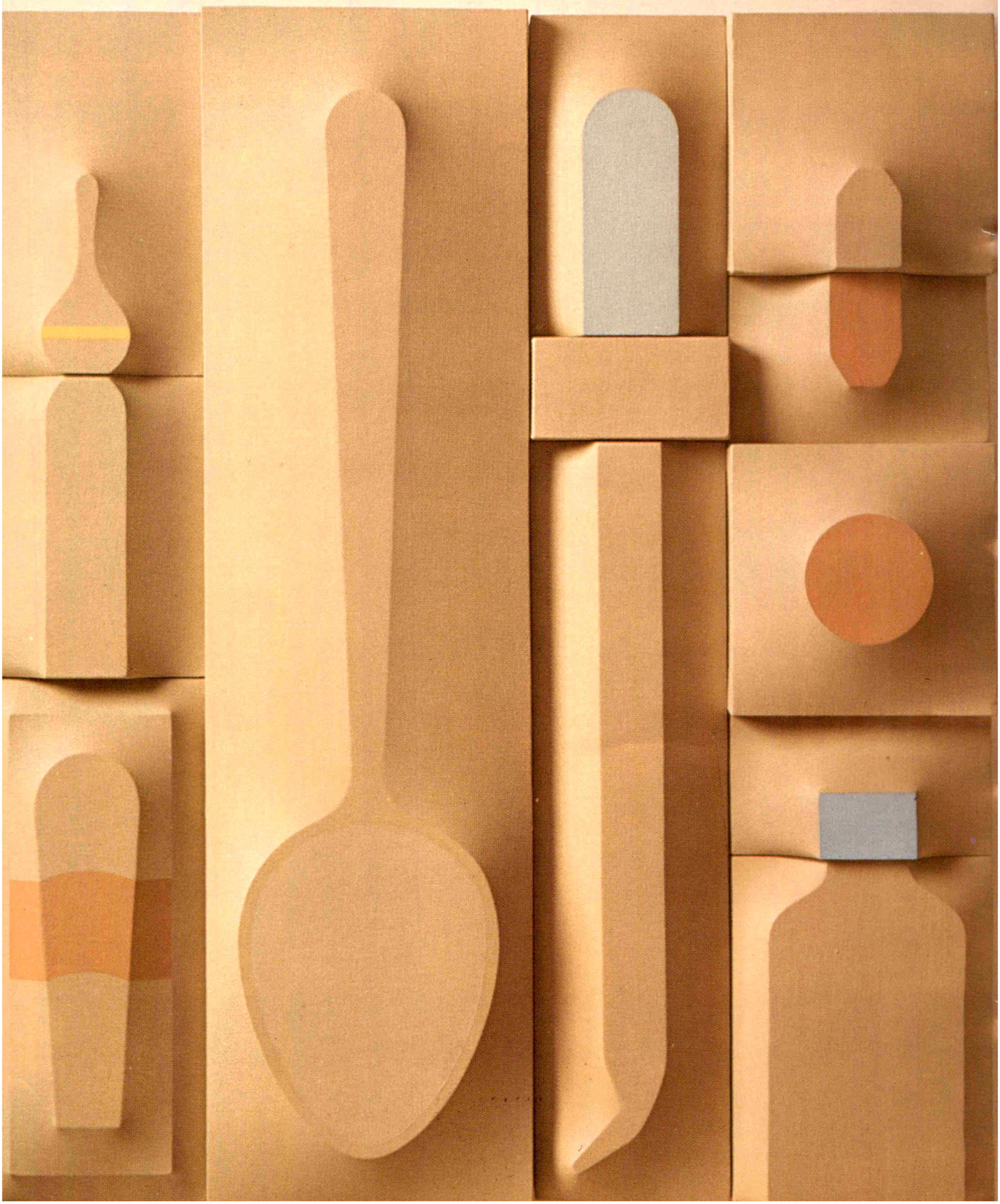


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THE AMERICAN JOURNAL OF PSYCHIATRY

CALCUTTA CENTRAL URBAN UNIVERSITY

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Also in this issue

Andrzej Jus on Social Systems and Health

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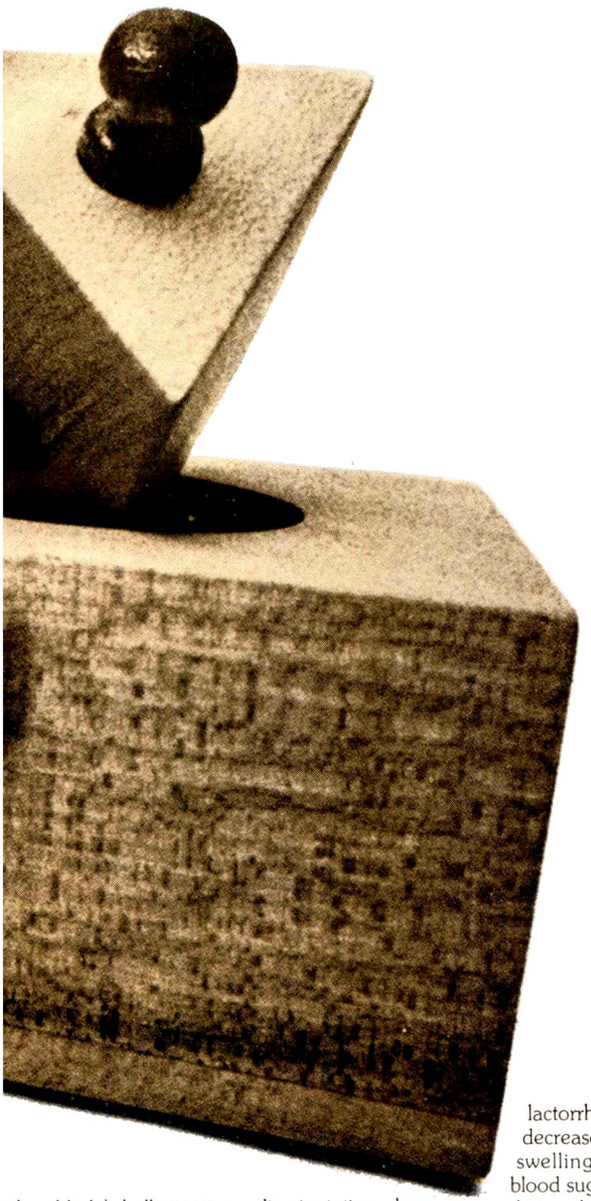
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Coping with Depression

The ability to cope with depressive illness, for the patient and to some degree for the physician, largely depends on hope—a crutch that is usually lacking in the depressed patient. To the depressed patient all the good things of life are bleak, black, or unattainable; all that is bad has been happening or will happen. Helping such a patient to cope with life again, to overcome the incapacitating moods, outlooks, and fears which characterize depression, can be a most rewarding experience for the physician.

Although Norpramin® (desipramine hydrochloride) is relatively rapid-acting, the patient should be told that he will not feel better immediately but that he will gradually become his old self again. A minor tranquilizer in appropriate dosage may be used with Norpramin temporarily if anxiety due to depression is present; a phenothiazine may be used similarly if agitation is severe.

Frequently, Norpramin and your own understanding of the patient are all that is necessary.

Norpramin®
(desipramine hydrochloride)
helps the depressed cope with life again.

the elderly), hallucinations, disorientation, delusions; anxiety, agitation; insomnia and nightmares; hypomania; exacerbation of psychosis. *Neurological:* paresthesias of extremities; incoordination, ataxia, tremors, peripheral neuropathy; extrapyramidal symptoms; seizures; alteration in EEG patterns; tinnitus. *Anticholinergic:* dry mouth, and rarely associated sublingual adenitis; blurred vision, disturbance of accommodation, mydriasis; constipation, paralytic ileus; urinary retention, delayed micturition, hypotonic bladder. *Allergic:* skin rash, petechiae, urticaria, itching, photosensitization, edema (of face and tongue or general), drug fever. *Hematologic:* agranulocytosis, eosinophilia, purpura, thrombocytopenia. *Gastrointestinal:* anorexia, nausea and vomiting, epigastric distress, peculiar taste, abdominal cramps, diarrhea, stomatitis, black tongue. *Endocrine:* gynecomastia; breast enlargement and galactorrhea in the female; increased or decreased libido, impotence, testicular swelling; elevation or depression of blood sugar levels. *Other:* jaundice (simulating obstructive), altered liver function; weight gain or loss; perspiration, flushing; urinary frequency, nocturia; parotid swelling; drowsiness, dizziness, weakness and fatigue, headache; alopecia. *Withdrawal Symptoms:* Though not indicative of addiction, abrupt cessation after prolonged therapy may produce nausea, headache and malaise.

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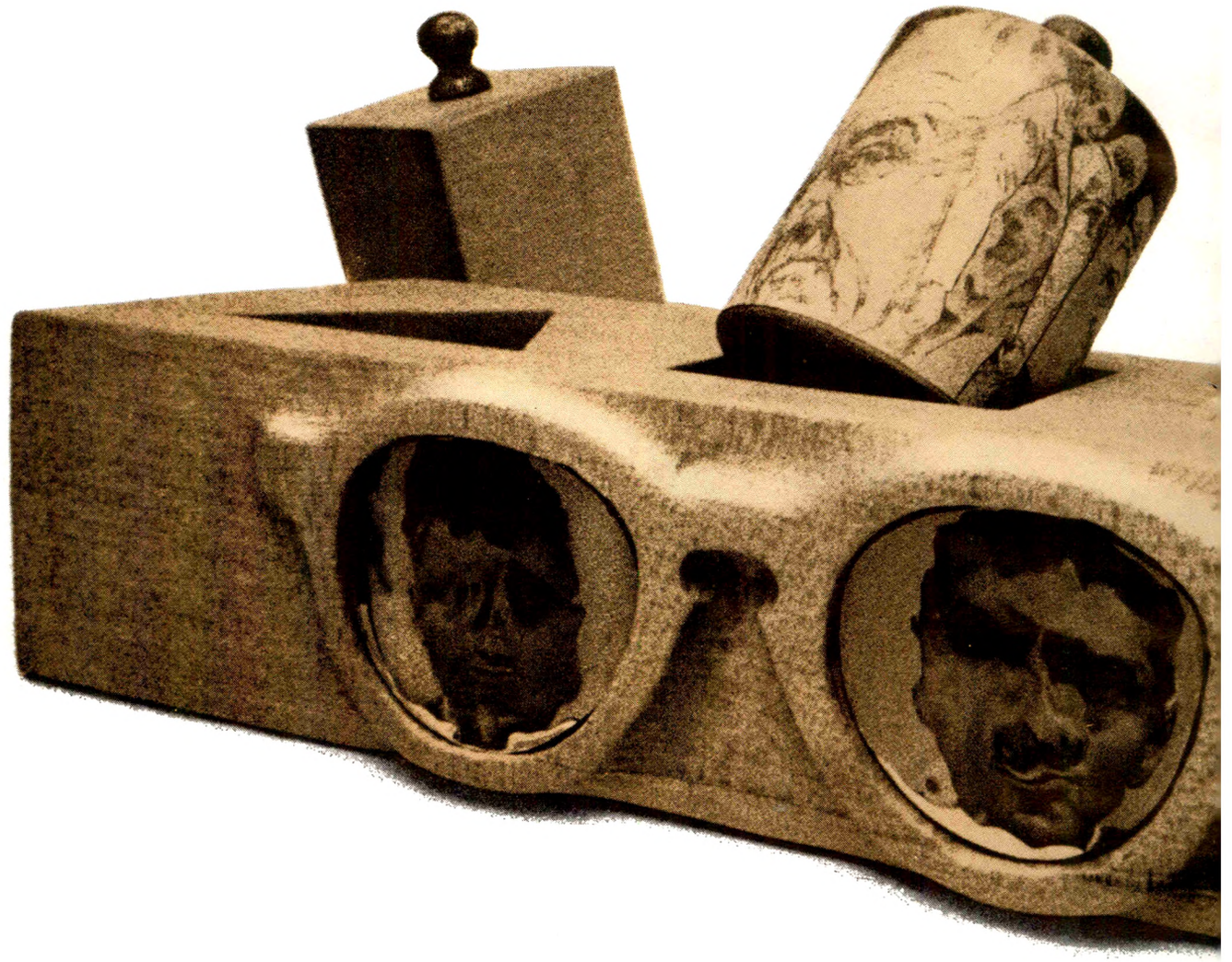
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Milwaukee, Wisconsin 53201

Help improve your depressed patients' ability to cope.



In Brief:
Actions: Norpramin® (desipramine hydrochloride) is an antidepressant drug of the tricyclic type. It has been found in some studies to have a more rapid onset of action than imipramine; antidepressant efficacy is similar though potency on a weight basis may be less. The earliest manifestations consist mainly of an increase in psychomotor activity. Full treatment benefit is seldom attained before the end of the second week.
Indications: Norpramin® (desipramine hydrochloride) is indicated for the relief of depressive symptoms. Endogenous depressions are more likely to be alleviated than others.
Contraindications: Desipramine hydrochloride should not be given within two weeks of treatment with a monoamine oxidase inhibitor. Contraindications include the acute recovery period following myocardial infarction and hypersensitivity to the drug. Cross sensitivity with other dibenzazepines is a possibility.
Warnings: 1. Extreme caution should be used in patients: (a) with cardiovascular disease, (b) with a history of urinary retention or glaucoma, (c) with thyroid disease or those on thyroid medication, (d) with a history of seizure disorder. 2. This drug is capable of blocking the antihypertensive effect of guanethidine and similarly acting compounds. 3. *Use in Pregnancy:* Safe use during pregnancy and lactation has not been established. 4. *Use in Children:* Norpramin® (desipramine hydrochloride) is not recommended for use in children. 5. This drug may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks such as driving a car or operating machinery. Therefore, the patient should be cautioned accordingly.
Precautions: This drug should be dispensed in the least possible quantities to depressed outpatients, since suicide has been accomplished with drugs of this class. It should be kept out of reach of children. Reduce dosage, or alter treatment, if serious adverse effects occur. Norpramin® (desipramine hydrochloride) therapy in patients with manic-depressive illness may induce a hypomanic state after the depressive phase terminates and may cause exacerbation of psychosis in schizophrenic patients. Close supervision and careful adjustment of dosage are required when this drug is given along with anticholinergic or sympathomimetic drugs. While taking this drug, response to alcoholic beverages may be exaggerated. There is limited clinical experience in the concurrent administration of ECT and antidepressant drugs; thus, one should consider the possibility of increased risk relative to benefits. Discontinue as soon as possible prior to elective surgery because of possible cardiovascular effects. Hypertensive episodes have been observed during surgery in patients on desipramine hydrochloride. Leukocyte and differential counts should be performed in any patient who develops fever and sore throat during therapy; the drug should be discontinued if there is neutropenia.
Adverse Reactions: *Cardiovascular:* hypotension, hypertension, tachycardia, palpitation, arrhythmias, heart block, myocardial infarction, stroke. *Psychiatric:* confusional states (especially

Controlled Drug Delivery

in schizophrenia with new

PROLIXIN® DECANOATE

(FLUPHENAZINE DECANOATE INJECTION)

BRIEF SUMMARY

Prolixin Decanoate (Fluphenazine Decanoate Injection) provides 25 mg. fluphenazine decanoate per cc. in a sesame oil vehicle with 1.2% (w/v) benzyl alcohol as a preservative.

CONTRAINDICATIONS: In presence of suspected or established subcortical brain damage. In patients who have a blood dyscrasia, liver damage or renal insufficiency, or who are receiving large doses of hypnotics, or who are comatose or severely depressed. In patients who have shown hypersensitivity to fluphenazine; cross-sensitivity to phenothiazine derivatives may occur.

Not intended for use in children under 12.

WARNINGS: Mental and physical abilities required for driving a car or operating heavy machinery may be impaired by use of this drug. Physicians should be alert to the possibility that severe adverse reactions may occur which require immediate medical attention. Potentiation of effects of alcohol may occur. Safety for use during pregnancy has not been established; weigh possible hazards against potential benefits if administered during pregnancy.

PRECAUTIONS: Caution must be exercised if another phenothiazine compound caused cholestatic jaundice, dermatoses or other allergic reactions because of the possibility of cross-sensitivity. When psychotic patients on large doses of a phenothiazine drug are to undergo surgery, hypotensive phenomena should be watched for; less anesthetics or central nervous system depressants may be required. Because of added anti-cholinergic effects, fluphenazine may potentiate the effects of atropine.

Use fluphenazine decanoate cautiously in patients exposed to extreme heat or phosphorus insecticides; in patients with ulcer disease history since aggravation of peptic ulcer has occurred; in patients with history of convulsive disorders since grand mal convulsions have occurred; and in patients with special medical disorders such as mitral insufficiency or other cardiovascular diseases, and pheochromocytoma. Bear in mind that with prolonged therapy there is the possibility of liver damage, pigmentary retinopathy, lenticular and corneal deposits, and development of irreversible dyskinesia.

Fluphenazine decanoate should be administered under the direction of a physician experienced in the clinical use of psychotropic drugs. Periodic checking of hepatic and renal functions and blood picture should be done. Renal function of patients on long-term therapy should be monitored; if BUN becomes abnormal, treatment should be discontinued. "Silent pneumonias" are possible.

ADVERSE REACTIONS: *Central Nervous System*—Extrapyramidal symptoms are most frequently reported. These include pseudoparkinsonism, dystonia, dyskinesia, akathisia, oculogyric crises, opisthotonos, and hyperreflexia; most often these are reversible, but they may be persistent. One can expect a higher incidence of such reactions with fluphenazine decanoate than with less potent piperazine derivatives or straight-chain phenothiazines. The incidence and severity will depend more on individual patient sensitivity, but dosage level and patient age are also determinants. As these reactions may be alarming, the patient should be forewarned and reassured. These reactions can usually be controlled by administration of anti-parkinsonian drugs such as benztropine mesylate or intravenous Caffeine and Sodium Benzoate Injection U.S.P., and by subsequent reduction in dosage. A persistent and sometimes irreversible pseudo-parkinsonian syndrome may develop with chronic administration of phenothiazine compounds. Rhythmic, stereotyped dyskinetic involuntary movements, particularly of the face, mouth, tongue and jaw occur, and may be accompanied by choreiform movements of the limbs. The symptoms persist after drug withdrawal. Anti-parkinsonian agents are seldom of benefit. The risk appears to be greatest in elderly females with organic brain damage receiving large and prolonged doses. Phenothiazine derivatives have been known to cause restlessness, excitement, or bizarre dreams and reactivation or aggravation of psychotic processes may be encountered. If drowsiness or lethargy occur, the dosage may have to be reduced. Dosages, far in excess of the recommended amounts, may induce a catatonic-like state.

Autonomic Nervous System—Hypertension and fluctuations in blood pressure have been reported. Although hypotension is rarely a problem, patients with pheochromocytoma, cerebral vascular or renal insufficiency or severe cardiac reserve deficiency such as mitral insufficiency appear to be particularly prone to this reaction and should be observed carefully. Supportive measures including intravenous vasopressor drugs should be instituted immediately should severe hypotension occur; Levarterenol Bitartrate Injection U.S.P. is the most suitable drug; *epinephrine should not be used* since phenothiazine derivatives have been found to reverse its action. Nausea, loss of appetite, salivation, polyuria, perspiration, dry mouth, headache and constipation may occur. Reducing or temporarily discontinuing the dosage will usually control these effects. Blurred vision, glaucoma, bladder paralysis, fecal impaction, paralytic ileus, tachycardia or nasal congestion have occurred in some patients on phenothiazine derivatives.

Metabolic and Endocrine—Weight change, peripheral edema, abnormal lactation, gynecomastia, menstrual irregularities, false results on pregnancy tests, impotency in men and increased libido in women have occurred in some patients on phenothiazine therapy.

Allergic Reactions—Itching, erythema, urticaria, seborrhea, photosensitivity, eczema and exfoliative dermatitis have been reported with phenothiazines. The possibility of anaphylactoid reactions should be borne in mind.

Hematologic—Blood dyscrasias including leukopenia, agranulocytosis, thrombocytopenic or nonthrombocytopenic purpura, eosinophilia, and pancytopenia have been observed with phenothiazines. If soreness of the mouth, gums or throat or any symptoms of upper respiratory infection occur and confirmatory leukocyte count indicates cellular depression, therapy should be discontinued and other appropriate measures instituted immediately.

Hepatic—Liver damage manifested by cholestatic jaundice, particularly during the first months of therapy, may occur; treatment should be discontinued. A cephalin flocculation increase, sometimes accompanied by alterations in other liver function tests, has been reported in patients who have had no clinical evidence of liver damage.

Others—Sudden deaths have been reported in hospitalized patients on phenothiazines. Previous brain damage or seizures may be predisposing factors. High doses should be avoided in known seizure patients. Shortly before death, several patients showed flare-ups of psychotic behavior patterns. Autopsy findings have usually revealed acute fulminating pneumonia or pneumonitis, aspiration of gastric contents, or intramyocardial lesions. Although not a general feature of fluphenazine, potentiation of central nervous system depressants such as opiates, analgesics, antihistamines, barbiturates, and alcohol may occur.

Hypotension severe enough to cause fatal cardiac arrest, altered electrocardiographic and electroencephalographic tracings, altered cerebrospinal fluid proteins, cerebral edema, asthma, laryngeal edema, and angioneurotic edema; with long-term use, skin pigmentation and lenticular and corneal opacities have occurred with phenothiazines. Local tissue reactions occur only rarely with injections of fluphenazine decanoate.

For full prescribing information, consult package insert.

Supply: 1 cc. Unimatic® single dose preassembled syringes and cartridge-needle units, and 5 cc. vials.



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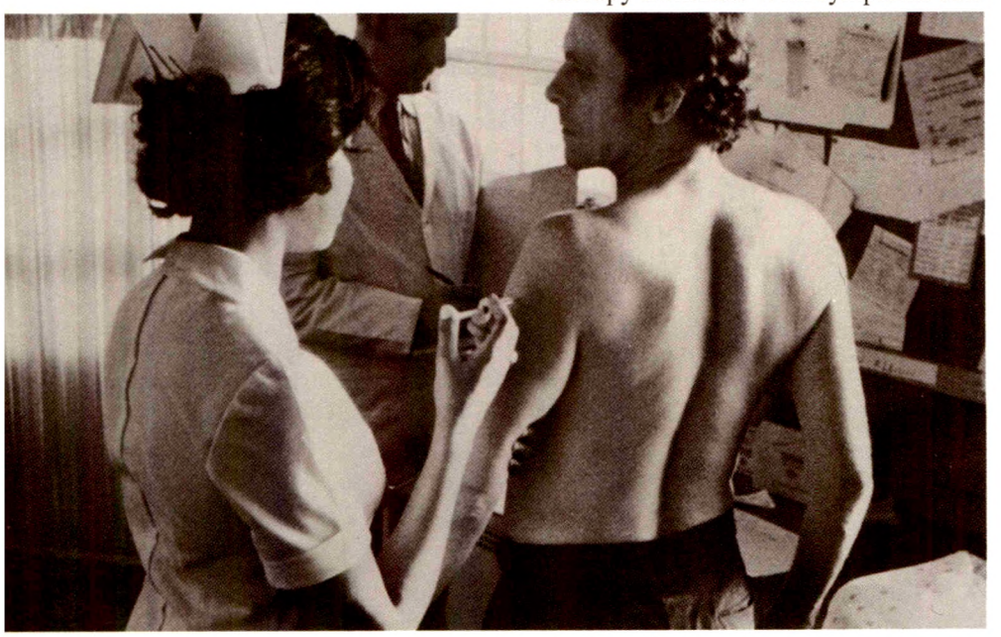
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(Continued from preceding page)
ability of the inpatient and help maintain him in the community are true for the patient who has never been hospitalized. It is just these advantages that will help the physician or psychiatrist keep him in the community without the need for custodial care.

Controlled drug delivery — a revolution in efficiency of administration

PROLIXIN® DECANOATE (Fluphenazine Decanoate Injection) SAVES TIME, REDUCES COST IN THE HOSPITAL, CLINIC, OFFICE

Controlled drug delivery saves time, reduces costs in the hospital. With Prolixin Decanoate there can be no palming, pouching, regurgitating. With Prolixin Decanoate resistance to therapy dwindles. With symptoms controlled, the patient is more manageable, more comfortable, more amenable to the total hospital treatment program. With Prolixin Decanoate only 1 dose visit every 1 to 3 weeks with an average of about 2 weeks is required.





Controlled drug delivery saves time, reduces costs in the clinic and office.

With Prolixin Decanoate less frequen dosing. With Prolixin Decanoate (Flu phenazine Decanoate Injection) mos patients report for their injections onl once in every 2-week period.

18 PATIENTS	18 PATIENTS
	
8 a.m. ¾ hr. 2 p.m. ¾ hr. 6 p.m. ¾ hr.	1 injection every 14 days for most patients
=2¼ hrs. nursing time	4 minutes required for each injection (approx.)
2¼ hrs. × 14 days **=31½ hrs. of nursing time every 14 days**	**=1 hr. 10 minutes nursing time in 14 days**
NURSING TIME SAVED IN 14 DAYS: 30 hours, 20 minutes[4]	

Controlled drug delivery — a revolution in convenience of administration

PROLIXIN® DECANOATE (Fluphenazine Decanoate Injection) MAY BE DELIVERED IN EASY-TO-USE UNIMATIC® SYRINGES

Prolixin Decanoate may be give intramuscularly or subcutaneousl Local tissue reactions occur only rarel

A dry syringe and needle of at lea 21 gauge should be used. Use of a we needle or syringe may cause the sol tion to become cloudy. Prolixin Dec noate is available in vials of 5 cc. an in Unimatic single-dose preassemble syringes and in Unimatic cartridg needle units with a reusable-plasti holder.

N.B. Extrapyramidal reactions c cur frequently. Most often they are r versible and can usually be controlle by administration of antiparkinsonia drugs. However, in some instance they are persistent (see Adverse R actions section of Brief Summary Patients should be forewarned an reassured.

Reference: 1. Keskiner, A. et al.: Arch. G Psychiatry 18:477, Apr. 1968. 2. Goldbe H. L., DiMascio, A. and Chaudhary, B.: P chosomatics 11:173, May-June 1970. 3. M Clellan, T. A. and Cowan, G.: BRIE COMMUNICATIONS. Am. J. Psychiat 126:1771, June 1970. 4. Platt, R.: Br. J. S Psychiatry 2:187, 1968.

For Brief Summary, see opposite pag

For brief summary, see last page of this presentation.

ROLIXIN® DECANOATE
'luphenazine Decanoate Injection)
SSURES ECONOMIC DRUG
ELIVERY...LESS FREQUENT
OSING THAN WITH ORAL
HERAPY

Controlled drug delivery brings cost therapy down with less hospitaliza-ɔn, less nursing time, less frequent ɜsing. Low annual dosage means less st for the hospital, for the patient's mily, and for the community. It eans a minimum of drug holidays to oid long-term complications, with eir confusing schedules for patient ıd family.

ɔntrolled drug delivery — revolution in the treatment of the hizophrenic patient

ROLIXIN® DECANOATE
luphenazine Decanoate Injection)
ELPS ENHANCE LIKELIHOOD F DISCHARGE

Optimally, the mental hospital ould be a rehabilitating bridge be-een life before and life after custo-al care. Prolixin Decanoate often ɔrtens that bridge because getting the ɔatient out is frequently a matter of eping him medicated. And 1 injec-ɔn of Prolixin Decanoate means ap-oximately 2 weeks of symptom ntrol. The importance of control by ɜ physician with this injectable can seen in the fact that about 1 out of ery 5 inpatients does not take his tab-s even when they are administered by nursing staff. With controlled drug delivery, lost or hidden doses are not a problem.

In one study,[1] 24 chronic long-term hospital patients were treated with Prolixin Decanoate in dosages of 12.5 mg. to 75 mg. given every 7 days to 3 weeks. Most of the patients received 25 to 50 mg. per injection. Of these, 13 were discharged after 6 months of treatment, 4 were considered dischargeable, and 7 did not improve. In 12 of the 24 patients who previously had been on different psychotropic drugs for periods of 4 to 96 weeks, improvement with Prolixin Decanoate (Fluphenazine Decanoate Injection) was observed in affect, volition, and higher mental functions. Dischargeability in these patients "may also have been enhanced because the staff, the patient, and the family were assured of an adequate and regular medication intake."[1]

Controlled drug delivery — a revolution in the care of the outpatient

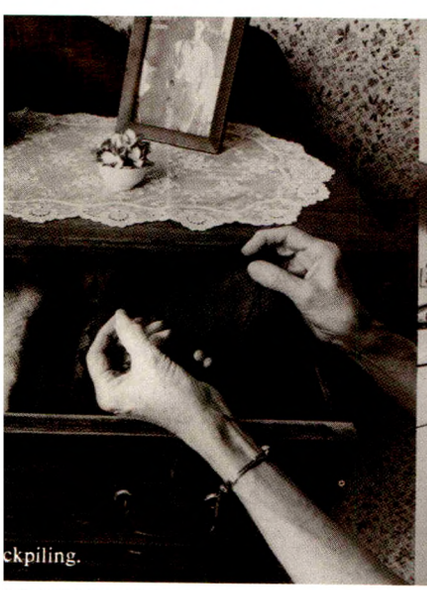
PROLIXIN® DECANOATE
(Fluphenazine Decanoate Injection)
PROMOTES CONTINUITY OF MEDICATION WITH DIMINISHED LIKELIHOOD OF RELAPSE COMPARED WITH ORAL THERAPY

Success in rehabilitative areas like employment and social acceptance depends in large measure on adequate and continuing phenothiazine intake; success in family adjustment no less so. Short-acting medication is not the best path to such success. According to one report,[2] "approximately 50% of all discharged psychotic patients fail to take even the first dose of their outpatient medication." And McClellan and Cowan[3] state that a substantial number of patients taking antipsychotic drugs do so in amounts significantly less than those prescribed. Even once-daily administration does not solve the problem of poor home supervision or the patient's lack of insight into his condition.

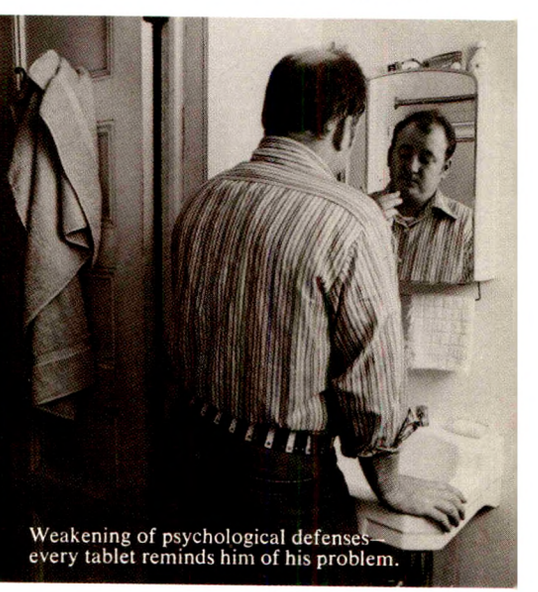
Controlled drug delivery with Prolixin Decanoate (Fluphenazine Decanoate Injection) is an efficient route to continuity of medication, and therefore to long-term remission. For one thing there is less strain on the patient's often tenuous adjustment to family living. Since family members are not responsible for supervising the patient's medical needs, they tend to be more accepting, and better feeling is promoted merely because the controlled delivery regimen demonstrates that improvement is possible. Controlled drug delivery also strengthens the patient's psychological defenses. He is not reminded of his psychiatric illness by multiple daily doses.

The same unique advantages of controlled drug delivery with Prolixin Decanoate that promote the discharge-

(Continued on following page)


ckpiling.


Misleading advice from family and friends.


Weakening of psychological defenses — every tablet reminds him of his problem.

OD REASONS FOR CONTROLLED DRUG DELIVERY



THE AMERICAN JOURNAL OF PSYCHIATRY

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The American Journal of Psychiatry, formerly *The American Journal of Insanity*, is published monthly by the American Psychiatric Association. Editorial office: 1700 Eighteenth Street, N.W., Washington, D.C. 20009; telephone (202) 232-7878.

Subscriptions: U.S. $15.00 per year, Canada and South America $15.75, other foreign $18.00; single issues: $1.75 plus postage.

APA members should direct changes of address and communications about nonreceipt of the *Journal* to the Manpower Division, American Psychiatric Association, 1700 Eighteenth Street, N.W., Washington, D.C. 20009.

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Advertising representatives: Steven K. Herlitz, Inc., 850 Third Avenue, New York, N.Y. 10022.

Printed by Dartmouth Printing Co., 69 Lyme Road, Hanover, N.H. 03755.

Second class postage paid at Washington, D.C., and additional mailing offices.

Indexed in *Abstracts for Social Workers, Biological Abstracts, Chemical Abstracts, Cumulative Index to Nursing Literature, Excerpta Medica, Hospital Literature Index, Index Medicus, International Nursing Index, Nutrition Abstracts*, and *Psychological Abstracts*.

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3. Blackwell B, Marley E, Price J, et al: Hypertensive interactions between monoamine oxidase inhibitors and foodstuffs. Br J Psychiatry 113:349–365, 1967
4. Brosin H: Communication systems of the consultation process, in The Psychiatric Consultation. Edited by Mendel W, Solomon P. New York, Grune & Stratton, 1968, pp 1–12

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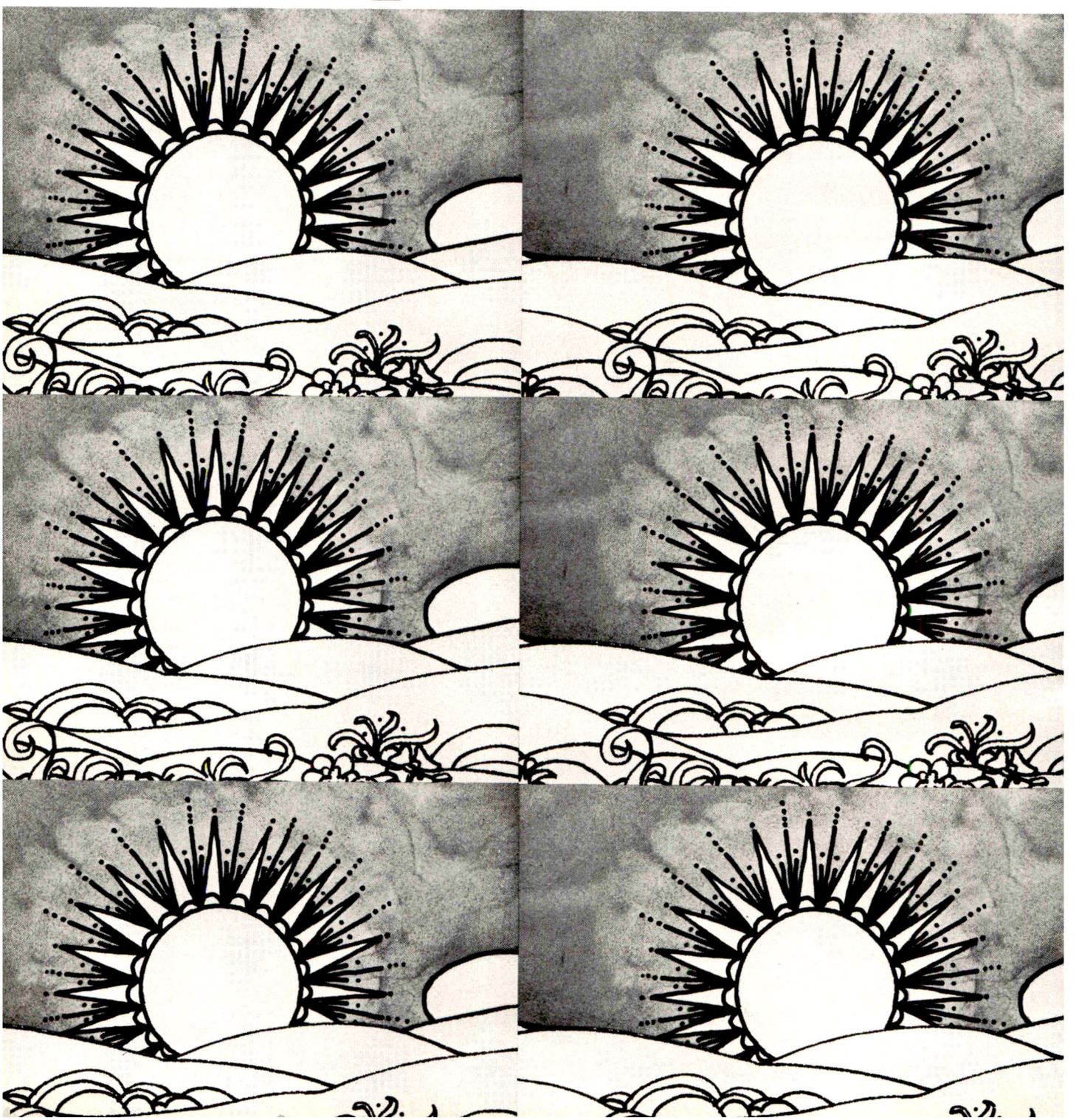
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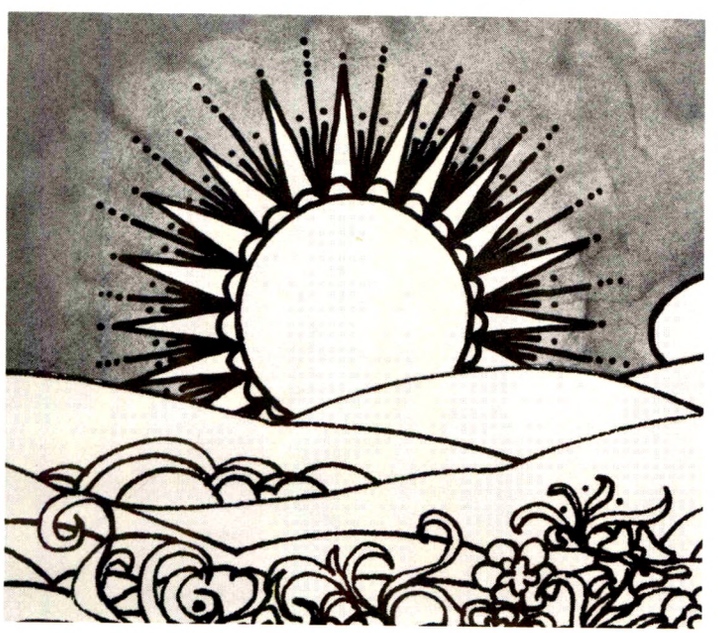
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The new-day constant for drug-induced parkinsonism:



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TRIHEXYPHENIDYL HCl

Non-cumulative action makes each day of therapy a new day



That's why ARTANE is ideally suited for the patient on long-term phenothiazine therapy. In economical tablets or SEQUELS Sustained Release Capsules*, it offers you *more* than the rapid reversal of extrapyramidal symptoms.

Usually there is no drug buildup to cause undue toxicity in prolonged therapy. Minimal atropine-like side effects. Accurate dosage titration in adjunctive use. And, to minimize missed doses and anxiety in outpatient therapy— one-dose *all-day* control or prevention with SEQUELS.*

For hospitalized or ambulatory patients, ARTANE has the "constant" they need. Effective *non-cumulative* action.

Tablets—2 mg, 5 mg; Elixir†—2 mg/5 cc or SEQUELS® Sustained Release Capsules—5 mg.

Tablets and Elixir Indications: FDA has evaluated this drug as Effective as an adjunct in the therapy of the indications listed below under SEQUELS.

***INDICATIONS FOR ARTANE SEQUELS:**
Based on a review of this drug in sustained release form by the National Academy of Sciences-National Research Council and/or other information, FDA has classified the indications as follows: Probably effective as an adjunct in the therapy of all forms of parkinsonism (postencephalitic, arteriosclerotic, and idiopathic) and for the use in the prevention or control of extrapyramidal disorders due to central nervous system drugs such as reserpine and phenothiazines.

Precautions: Patients with cardiac, liver or kidney disorders or with hypertension should be maintained under close observation. In long-term therapy, take care to avoid allergic and other untoward reactions. Use with caution in patients with glaucoma, obstructive disease of the gastrointestinal or genitourinary tracts and in elderly males with possible prostatic hypertrophy. Geriatric patients require strict dosage regulation. Incipient glaucoma may be precipitated.

Adverse Reactions: Such effects as dryness of mouth, blurring of vision, dizziness, nausea or nervousness will be experienced by 30 to 50 per cent of patients. (These tend to lessen and can often be controlled by adjusting dosage.) Isolated instances of suppurative parotitis, skin rashes, dilatation of the colon, paralytic ileus, delusions, hallucinations and paranoia (1 doubtful case) have been reported. Patients with arteriosclerosis or with a history of idiosyncrasy to drugs may exhibit mental confusion, agitation, disturbed behavior, or nausea and vomiting. If a severe reaction occurs, discontinue drug for a few days, then resume at lower dosage. Psychiatric disturbances can result from overdosage to sustain euphoria. Side effects of any atropine-like drugs include constipation, drowsiness, urinary hesitancy or retention, tachycardia, dilation of the pupil, increased intraocular tension, weakness, vomiting and headache.

†Lime-mint flavored, with 0.08% methylparaben. 0.02% propylparaben, and 5% alcohol as preservatives.

*This drug in sustained release form has been evaluated as probably effective. See Brief Summary.

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FOR YOUR STAFF:

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As more types of personnel become involved in the treatment and rehabilitation of the mentally ill, this useful reference meets the need for a simplified, factual presentation of the complex field of clinical psychiatry. Carefully revised, this new edition reflects the current trend to a psychodynamic approach to mental illness. In addition to offering basic information, it clarifies recent findings concerning the use of depth electrodes in taking EEG's, and includes new material on the use of EEG's in diagnosing epilepsy. A useful table catalogs defense mechanisms.

By GEORGE A. ULETT, A.B., M.S., M.D., Ph.D., Professor and Chairman, Missouri Institute of Psychiatry (St. Louis), University of Missouri School of Medicine. July, 1972. 5th edition, 367 pages plus FM I-XIV, 4⅞" x 7⅝". Price, $10.90.

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Withdrawn and uncommunicative?...Or responsive?

While psychotic symptoms remain acute, the barrier between you and the withdrawn, uncommunicative patient may be insurmountable. Prompt intervention with HALDOL (haloperidol) often makes it possible for you to reach... relate...rehabilitate.

And rapport with such patients is further enhanced because HALDOL usually leaves patients alert and relatively non-sedated.

responsiveness often begins with

HALDOL® (haloperidol)

For information relating to Indications, Contraindications, Warnings, Precautions and Adverse Reactions, please turn page

Haldol®
(HALOPERIDOL)

a first choice for prompt rapport

A Dosage Form for Every Need:

4 tablet strengths for convenience in individualizing dosage: ½ mg., 1 mg., 2 mg. and 5 mg.

An undetectable, tasteless Liquid Concentrate for the patient unable or unwilling to swallow tablets: 2 mg. per cc.

A rapid-acting Injection for psychiatric emergencies: 5 mg. per cc., with 0.5 mg. methylparaben and 0.05 mg. propylparaben per cc., and lactic acid for pH adjustment to 3.4±0.2.

Summary of Directions for Use

Indications: For the treatment of such symptoms as moderate to severe agitation, anxiety and tension, assaultiveness, delusions, hallucinations, hostility, and hyperactivity when they are manifestations of psychosis including schizophrenia, the manic type of manic depressive illness, or psychotic reactions associated with organic brain syndromes or mental retardation. For the control of tics and vocal utterances of Gilles de la Tourette's Syndrome.

Contraindications: HALDOL (haloperidol) is contraindicated in patients who are severely depressed, comatose, have CNS depression due to alcohol or other centrally-acting depressants, have Parkinson's disease or are hypersensitive to this drug.

Warnings: ***Usage in Pregnancy***—Safe use of HALDOL (haloperidol) in pregnancy and lactation has not been established; therefore, its use in pregnancy, in nursing mothers, or in women of childbearing potential requires that the possible benefits of the drug be weighed against the potential hazards. A case of phocomelia in an infant whose mother received haloperidol along with a number of other medications during the first trimester of pregnancy has been reported (a causal relationship was not established in this case). Animals receiving 2 to 20 times the maximum human dose of HALDOL orally and/or parenterally showed increased incidence of resorption, reduced fertility, delayed delivery, dose-related pup mortality (presumably due to lack of maternal care reflecting CNS depression).

Usage in Children—Safety and effectiveness in children have not been established; therefore, this drug is not recommended for use in the pediatric age group.

General—Cases of bronchopneumonia, some fatal, have followed the use of major tranquilizers, including haloperidol. It has been postulated that lethargy and decreased sensation of thirst may lead to dehydration, hemoconcentration and reduced pulmonary ventilation. If these signs and symptoms appear, especially in the elderly, the physician should institute remedial therapy promptly. Although not reported with HALDOL (haloperidol), decreased serum cholesterol and/or cutaneous and ocular changes have been reported in patients receiving chemically-related drugs. HALDOL may impair the mental and/or physical abilities required for the performance of hazardous tasks such as operating machinery or driving a motor vehicle. The ambulatory patient should be warned accordingly. The use of alcohol should be avoided due to possible additive effects and hypotension.

Precautions: HALDOL (haloperidol) should be administered cautiously to patients: (1)—with severe cardiovascular disorders, because of the possibility of transient hypotension and/or precipitation of anginal pain. Should hypotension occur and a vasopressor be required, *epinephrine should not be used* since HALDOL may block its vasopressor activity and paradoxical further lowering of blood pressure may occur. (2)—receiving anticonvulsant medication, because HALDOL may lower the convulsive threshold, although it will *not* increase the effects of anticonvulsant medication. Adequate anticonvulsant therapy should be maintained concomitantly. (3)—with known allergies, or with a history of allergic reactions to drugs. (4)—receiving anticoagulants, since an isolated instance of interference occurred with the effects of one anticoagulant (phenindione).

If concomitant anti-Parkinson medication is required, it may have to be continued after haloperidol is discontinued because of the difference in excretion rates. If both are discontinued simultaneously, extrapyramidal symptoms may occur. Intraocular pressure may increase when anticholinergic drugs, including anti-Parkinson agents, are administered concomitantly with HALDOL. When HALDOL is used to control mania in cyclic disorders there may be a rapid mood swing to depression.

Adverse Reactions: ***CNS Effects:*** *Extrapyramidal Reactions*—Neuromuscular (extrapyramidal) reactions have been reported frequently, often during the first few days of treatment. Generally they involved Parkinson-like symptoms which usually were mild to moderately severe and reversible. Other types of neuromuscular reactions (motor restlessness, dystonia, akathisia, hyperreflexia, opisthotonos, oculogyric crises) have been reported far less frequently, but were often more severe. Severe extrapyramidal reactions have been reported at relatively low doses. Generally extrapyramidal symptoms are dose related since they occur at relatively high doses and disappear or become less severe when the dose is reduced. Administration of anti-Parkinson drugs may be required for control of such reactions. Persistent extrapyramidal reactions have been reported and the drug may have to be discontinued in such cases. *Other CNS Effects*—Insomnia, restlessness, anxiety, euphoria, agitation, drowsiness, depression, lethargy, headache, confusion, vertigo, grand mal seizures, and exacerbation of psychotic symptoms including hallucinations. ***Cardiovascular Effects:*** Tachycardia and hypotension. ***Hematologic Effects:*** Reports have appeared of mild and usually transient leukopenia and leukocytosis, minimal decreases in red blood cell counts, anemia, or a tendency toward lymphomonocytosis. Agranulocytosis has rarely been reported and then only in association with other medication. ***Liver Effects:*** Impaired liver function and/or jaundice have been reported, although a causal relationship has not been established. ***Dermatologic Reactions:*** Maculopapular and acneiform skin reactions and isolated cases of photosensitivity and loss of hair. ***Endocrine Disorders:*** Lactation, breast engorgement, mastalgia, menstrual irregularities, gynecomastia, impotence, increased libido, hyperglycemia and hypoglycemia. ***Gastrointestinal Effects:*** Anorexia, constipation, diarrhea, hypersalivation, dyspepsia, nausea and vomiting. ***Autonomic Reactions:*** Dry mouth, blurred vision, urinary retention and diaphoresis. ***Respiratory Effects:*** Laryngospasm, bronchospasm and increased depth of respiration.

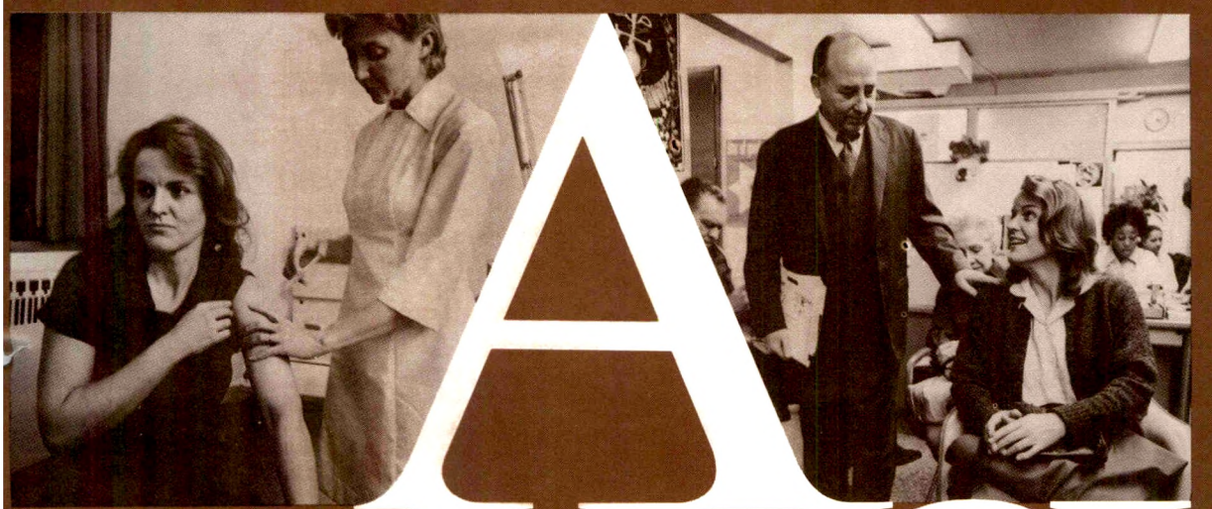
Complete dosage information available in insert which accompanies each package (or on request).

The use of the injectable form is intended for the acutely agitated psychotic patient with moderately severe to very severe symptoms.

IMPORTANT: Full directions for use should be read before HALDOL (haloperidol) is administered or prescribed. 11/72

McNEIL McNeil Laboratories, Inc.
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For schizophrenic patients...



A way out:



...that helps keep them out

Controlled Drug Delivery

with new

PROLIXIN® DECANOATE

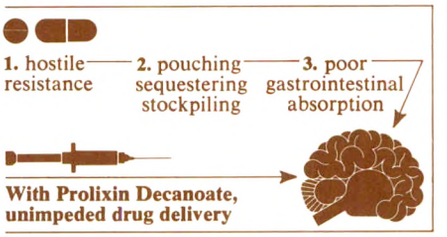
(FLUPHENAZINE DECANOATE INJECTION)

Puts control of the schizophrenic in your hands with injections 1 to 3 weeks apart or longer with an average duration of effect of about 2 weeks

Controlled drug delivery — a revolution in patient management

PROLIXIN® DECANOATE (Fluphenazine Decanoate Injection) HELPS ASSURE EFFECTIVE, UNHINDERED MEDICATION

Controlled drug delivery is *physician*-controlled delivery, an effective prophylactic maneuver against disruption of therapy—one of the most common causes of psychotic relapse. Is the patient taking his medication? You know because you administer it or direct others to. Once administered, therapy cannot be altered by the patient, by his family, or by anyone else.



In most patients, symptomatology is controlled by Prolixin Decanoate for periods of two weeks with a single injection. Sequestered medication and similar problems associated with oral therapy are not encountered. Nor does the patient risk drug loss through severe diarrhea or poor gastrointestinal absorption. Prolixin Decanoate keeps the patient medicated...helps make him more amenable to the entire treatment program and improves his chances for rehabilitation and discharge.

The outpatient is vulnerable to the dictates of his own poor judgment. Deluded by a sense of well-being, he may question the need for medication. Family and friends often give him misleading advice. Oral therapy in such a patient encourages missed doses. Medication with Prolixin Decanoate (Fluphenazine Decanoate Injection) helps assure drug delivery when required and in the dosage prescribed. It helps keep the outpatient out.


Missed doses.

FOUR REASONS FOR READMISSION...

For brief summary, see last page of this presentation.

PROLIXIN® DECANOATE (Fluphenazine Decanoate Injection) ASSURES ECONOMIC DRUG DELIVERY...LESS FREQUENT DOSING THAN WITH ORAL THERAPY

Controlled drug delivery brings cost of therapy down with less hospitalization, less nursing time, less frequent dosing. Low annual dosage means less cost for the hospital, for the patient's family, and for the community. It means a minimum of drug holidays to avoid long-term complications, with their confusing schedules for patient and family.

Controlled drug delivery — a revolution in the treatment of the schizophrenic patient

PROLIXIN® DECANOATE (Fluphenazine Decanoate Injection) HELPS ENHANCE LIKELIHOOD OF DISCHARGE

Optimally, the mental hospital should be a rehabilitating bridge between life before and life after custodial care. Prolixin Decanoate often shortens that bridge because getting the inpatient out is frequently a matter of keeping him medicated. And 1 injection of Prolixin Decanoate means approximately 2 weeks of symptom control. The importance of control by the physician with this injectable can be seen in the fact that about 1 out of every 5 inpatients does not take his tablets even when they are administered by nursing staff. With controlled drug delivery, lost or hidden doses are not a problem.

In one study,[1] 24 chronic long-term hospital patients were treated with Prolixin Decanoate in dosages of 12.5 mg. to 75 mg. given every 7 days to 3 weeks. Most of the patients received 25 to 50 mg. per injection. Of these, 13 were discharged after 6 months of treatment, 4 were considered dischargeable, and 7 did not improve. In 12 of the 24 patients who previously had been on different psychotropic drugs for periods of 4 to 96 weeks, improvement with Prolixin Decanoate (Fluphenazine Decanoate Injection) was observed in affect, volition, and higher mental functions. Dischargeability in these patients "may also have been enhanced because the staff, the patient, and the family were assured of an adequate and regular medication intake."[1]

Controlled drug delivery — a revolution in the care of the outpatient

PROLIXIN® DECANOATE (Fluphenazine Decanoate Injection) PROMOTES CONTINUITY OF MEDICATION WITH DIMINISHED LIKELIHOOD OF RELAPSE COMPARED WITH ORAL THERAPY

Success in rehabilitative areas like employment and social acceptance depends in large measure on adequate and continuing phenothiazine intake; success in family adjustment no less so. Short-acting medication is not the best path to such success. According to one report,[2] "approximately 50% of all discharged psychotic patients fail to take even the first dose of their outpatient medication." And McClellan and Cowan[3] state that a substantial number of patients taking antipsychotic drugs do so in amounts significantly less than those prescribed. Even once-daily administration does not solve the problem of poor home supervision or the patient's lack of insight into his condition.

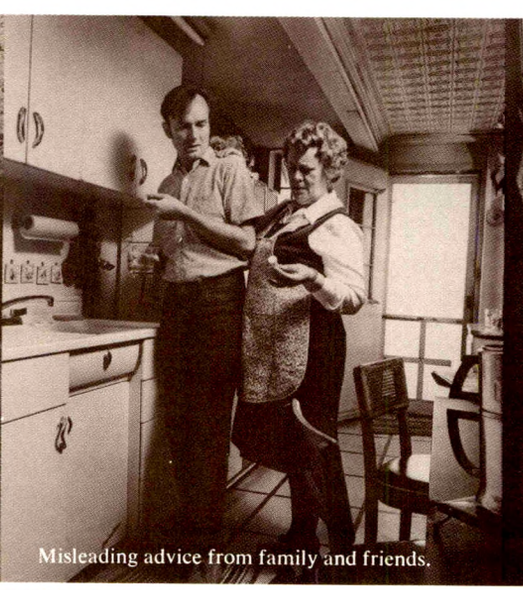
Controlled drug delivery with Prolixin Decanoate (Fluphenazine Decanoate Injection) is an efficient route to continuity of medication, and therefore to long-term remission. For one thing there is less strain on the patient's often tenuous adjustment to family living. Since family members are not responsible for supervising the patient's medical needs, they tend to be more accepting, and better feeling is promoted merely because the controlled delivery regimen demonstrates that improvement is possible. Controlled drug delivery also strengthens the patient's psychological defenses. He is not reminded of his psychiatric illness by multiple daily doses.

The same unique advantages of controlled drug delivery with Prolixin Decanoate that promote the discharge-

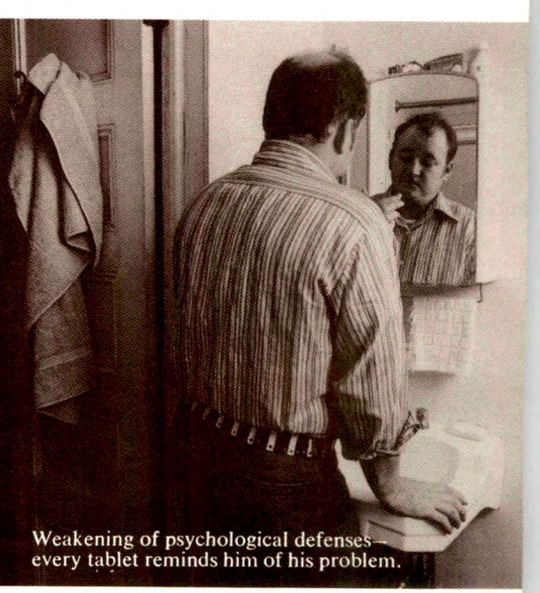
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Stockpiling.



Misleading advice from family and friends.



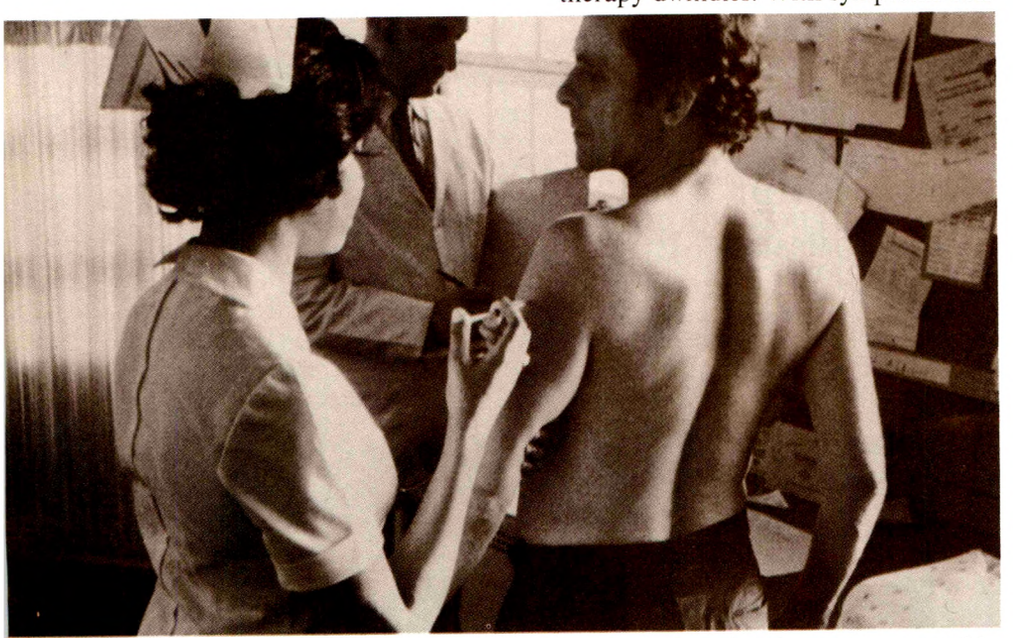
Weakening of psychological defenses — every tablet reminds him of his problem.

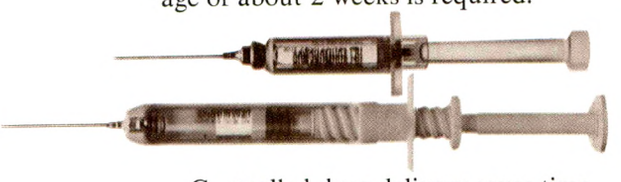
(Continued from preceding page)
ability of the inpatient and help maintain him in the community are true for the patient who has never been hospitalized. It is just these advantages that will help the physician or psychiatrist keep him in the community without the need for custodial care.

Controlled drug delivery—a revolution in efficiency of administration

PROLIXIN® DECANOATE (Fluphenazine Decanoate Injection) SAVES TIME, REDUCES COST IN THE HOSPITAL, CLINIC, OFFICE

Controlled drug delivery saves time, reduces costs in the hospital. With Prolixin Decanoate there can be no palming, pouching, regurgitating. With Prolixin Decanoate resistance to therapy dwindles. With symptoms controlled, the patient is more manageable, more comfortable, more amenable to the total hospital treatment program. With Prolixin Decanoate only 1 dose visit every 1 to 3 weeks with an average of about 2 weeks is required.





Controlled drug delivery saves time, reduces costs in the clinic and office.

With Prolixin Decanoate less frequent dosing. With Prolixin Decanoate (Fluphenazine Decanoate Injection) most patients report for their injections only once in every 2-week period.

18 PATIENTS	18 PATIENTS
	
8 a.m. ¾ hr. 2 p.m. ¾ hr. 6 p.m. ¾ hr.	1 injection every 14 days for most patients
=2¼ hrs. nursing time	4 minutes required for each injection (approx.)
2¼ hrs. × 14 days **=31½ hrs. of nursing time every 14 days**	**=1 hr. 10 minutes nursing time in 14 days**
NURSING TIME SAVED IN 14 DAYS: 30 hours, 20 minutes[4]	

Controlled drug delivery—a revolution in convenience of administration

PROLIXIN® DECANOATE (Fluphenazine Decanoate Injection) MAY BE DELIVERED IN EASY-TO-USE UNIMATIC® SYRINGES

Prolixin Decanoate may be given intramuscularly or subcutaneously Local tissue reactions occur only rarely

A dry syringe and needle of at least 21 gauge should be used. Use of a wet needle or syringe may cause the solution to become cloudy. Prolixin Decanoate is available in vials of 5 cc. and in Unimatic single-dose preassembled syringes and in Unimatic cartridge needle units with a reusable-plastic holder.

N.B. Extrapyramidal reactions occur frequently. Most often they are reversible and can usually be controlled by administration of antiparkinsonian drugs. However, in some instances they are persistent (see Adverse Reactions section of Brief Summary) Patients should be forewarned and reassured.

Reference: 1. Keskiner, A. et al.: Arch. Gen Psychiatry 18:477, Apr. 1968. 2. Goldberg H. L., DiMascio, A. and Chaudhary, B.: Psychosomatics 11:173, May-June 1970. 3. McClellan, T. A. and Cowan, G.: BRIEF COMMUNICATIONS. Am. J. Psychiatry 126:1771, June 1970. 4. Platt, R.: Br. J. Soc Psychiatry 2:187, 1968.

For Brief Summary, see opposite page

Controlled Drug Delivery

in schizophrenia with new

PROLIXIN® DECANOATE

(FLUPHENAZINE DECANOATE INJECTION)

BRIEF SUMMARY

Prolixin Decanoate (Fluphenazine Decanoate Injection) provides 25 mg. fluphenazine decanoate per cc. in a sesame oil vehicle with 1.2% (w/v) benzyl alcohol as a preservative.

CONTRAINDICATIONS: In presence of suspected or established subcortical brain damage. In patients who have a blood dyscrasia, liver damage or renal insufficiency, or who are receiving large doses of hypnotics, or who are comatose or severely depressed. In patients who have shown hypersensitivity to fluphenazine; cross-sensitivity to phenothiazine derivatives may occur.

Not intended for use in children under 12.

WARNINGS: Mental and physical abilities required for driving a car or operating heavy machinery may be impaired by use of this drug. Physicians should be alert to the possibility that severe adverse reactions may occur which require immediate medical attention. Potentiation of effects of alcohol may occur. Safety for use during pregnancy has not been established; weigh possible hazards against potential benefits if administered during pregnancy.

PRECAUTIONS: Caution must be exercised if another phenothiazine compound caused cholestatic jaundice, dermatoses or other allergic reactions because of the possibility of cross-sensitivity. When psychotic patients on large doses of a phenothiazine drug are to undergo surgery, hypotensive phenomena should be watched for; less anesthetics or central nervous system depressants may be required. Because of added anti-cholinergic effects, fluphenazine may potentiate the effects of atropine.

Use fluphenazine decanoate cautiously in patients exposed to extreme heat or phosphorus insecticides; in patients with ulcer disease history since aggravation of peptic ulcer has occurred; in patients with history of convulsive disorders since grand mal convulsions have occurred; and in patients with special medical disorders such as mitral insufficiency or other cardiovascular diseases, and pheochromocytoma. Bear in mind that with prolonged therapy there is the possibility of liver damage, pigmentary retinopathy, lenticular and corneal deposits, and development of irreversible dyskinesia.

Fluphenazine decanoate should be administered under the direction of a physician experienced in the clinical use of psychotropic drugs. Periodic checking of hepatic and renal functions and blood picture should be done. Renal function of patients on long-term therapy should be monitored; if BUN becomes abnormal, treatment should be discontinued. "Silent pneumonias" are possible.

ADVERSE REACTIONS: *Central Nervous System*—Extrapyramidal symptoms are most frequently reported. These include pseudoparkinsonism, dystonia, dyskinesia, akathisia, oculogyric crises, opisthotonos, and hyperreflexia; most often these are reversible, but they may be persistent. One can expect a higher incidence of such reactions with fluphenazine decanoate than with less potent piperazine derivatives or straight-chain phenothiazines. The incidence and severity will depend more on individual patient sensitivity, but dosage level and patient age are also determinants. As these reactions may be alarming, the patient should be forewarned and reassured. These reactions can usually be controlled by administration of anti-parkinsonian drugs such as benztropine mesylate or intravenous Caffeine and Sodium Benzoate Injection U.S.P., and by subsequent reduction in dosage. A persistent and sometimes irreversible pseudo-parkinsonian syndrome may develop with chronic administration of phenothiazine compounds. Rhythmic, stereotyped dyskinetic involuntary movements, particularly of the face, mouth, tongue and jaw occur, and may be accompanied by choreiform movements of the limbs. The symptoms persist after drug withdrawal. Antiparkinsonian agents are seldom of benefit. The risk appears to be greatest in elderly females with organic brain damage receiving large and prolonged doses. Phenothiazine derivatives have been known to cause restlessness, excitement, or bizarre dreams and reactivation or aggravation of psychotic processes may be encountered. If drowsiness or lethargy occur, the dosage may have to be reduced. Dosages, far in excess of the recommended amounts, may induce a catatonic-like state.

Autonomic Nervous System—Hypertension and fluctuations in blood pressure have been reported. Although hypotension is rarely a problem, patients with pheochromocytoma, cerebral vascular or renal insufficiency or severe cardiac reserve deficiency such as mitral insufficiency appear to be particularly prone to this reaction and should be observed carefully. Supportive measures including intravenous vasopressor drugs should be instituted immediately should severe hypotension occur; Levarterenol Bitartrate Injection U.S.P. is the most suitable drug; *epinephrine should not be used* since phenothiazine derivatives have been found to reverse its action. Nausea, loss of appetite, salivation, polyuria, perspiration, dry mouth, headache and constipation may occur. Reducing or temporarily discontinuing the dosage will usually control these effects. Blurred vision, glaucoma, bladder paralysis, fecal impaction, paralytic ileus, tachycardia or nasal congestion have occurred in some patients on phenothiazine derivatives.

Metabolic and Endocrine—Weight change, peripheral edema, abnormal lactation, gynecomastia, menstrual irregularities, false results on pregnancy tests, impotency in men and increased libido in women have occurred in some patients on phenothiazine therapy.

Allergic Reactions—Itching, erythema, urticaria, seborrhea, photosensitivity, eczema and exfoliative dermatitis have been reported with phenothiazines. The possibility of anaphylactoid reactions should be borne in mind.

Hematologic—Blood dyscrasias including leukopenia, agranulocytosis, thrombocytopenic or nonthrombocytopenic purpura, eosinophilia, and pancytopenia have been observed with phenothiazines. If soreness of the mouth, gums or throat or any symptoms of upper respiratory infection occur and confirmatory leukocyte count indicates cellular depression, therapy should be discontinued and other appropriate measures instituted immediately.

Hepatic—Liver damage manifested by cholestatic jaundice, particularly during the first months of therapy, may occur; treatment should be discontinued. A cephalin flocculation increase, sometimes accompanied by alterations in other liver function tests, has been reported in patients who have had no clinical evidence of liver damage.

Others—Sudden deaths have been reported in hospitalized patients on phenothiazines. Previous brain damage or seizures may be predisposing factors. High doses should be avoided in known seizure patients. Shortly before death, several patients showed flare-ups of psychotic behavior patterns. Autopsy findings have usually revealed acute fulminating pneumonia or pneumonitis, aspiration of gastric contents, or intramyocardial lesions. Although not a general feature of fluphenazine, potentiation of central nervous system depressants such as opiates, analgesics, antihistamines, barbiturates, and alcohol may occur.

Hypotension severe enough to cause fatal cardiac arrest, altered electrocardiographic and electroencephalographic tracings, altered cerebrospinal fluid proteins, cerebral edema, asthma, laryngeal edema, and angioneurotic edema; with long-term use, skin pigmentation and lenticular and corneal opacities have occurred with phenothiazines. Local tissue reactions occur only rarely with injections of fluphenazine decanoate.

For full prescribing information, consult package insert.

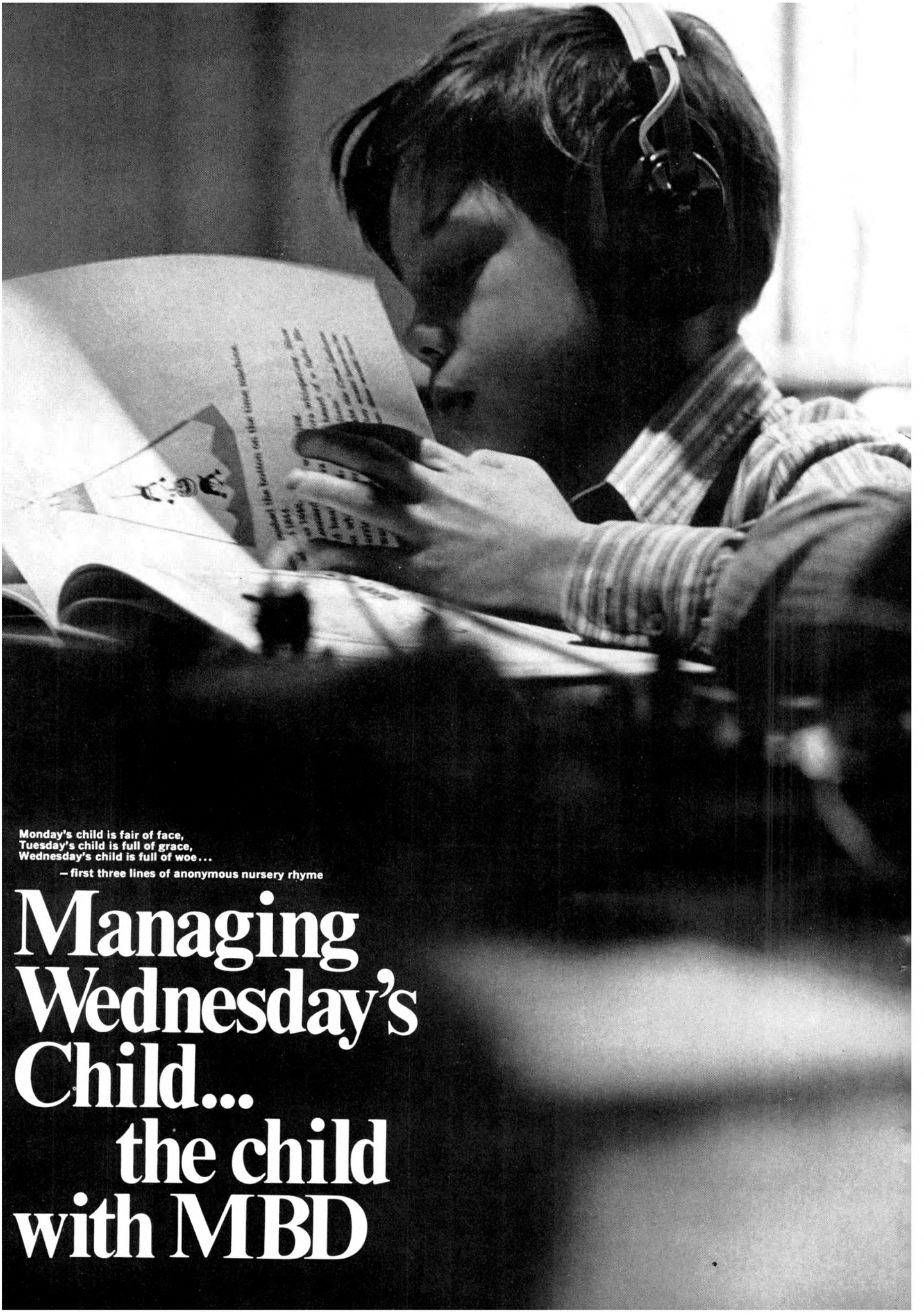
Supply: 1 cc. Unimatic® single dose preassembled syringes and cartridge-needle units, and 5 cc. vials.



SQUIBB HOSPITAL DIVISION

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A15



Monday's child is fair of face,
Tuesday's child is full of grace,
Wednesday's child is full of woe...

– first three lines of anonymous nursery rhyme

Managing Wednesday's Child... the child with MBD

"Wednesday's child is full of woe"
It need not be this way for the MBD child.
He can learn and adjust if given a helping hand.

Without help, the MBD child may be a slow reader, can find writing difficult, and arithmetic hard to grasp. He may be excitable, and his actions can be disruptive. The result can seriously hamper his educational and social development.

But, properly diagnosed and treated, MBD – Minimal Brain Dysfunction – can be brought under control so that the afflicted child can develop normally.

And Ritalin can play an important part in the total rehabilitation program of the MBD child, which includes remedial measures at home and at school. It's currently the drug of choice in many MBD situations.[1]



Ritalin is well tolerated. It can help control the excessive motor activity of the MBD child and ameliorate behavioral and learning problems.

Of course, Ritalin is not indicated for childhood personality and behavioral disorders not associated with MBD.

Reference
1. Charlton, M. H.: Paper presented at the Annual Convention of the Medical Society of the State of New York, New York, N.Y., Feb. 7, 1971.

Ritalin® hydrochloride ©
(methylphenidate hydrochloride)

TABLETS

INDICATION

Minimal Brain Dysfunction in Children—as adjunctive therapy to other remedial measures (psychological, educational, social)

Special Diagnostic Considerations

Specific etiology of Minimal Brain Dysfunction (MBD) is unknown, and there is no single diagnostic test. Adequate diagnosis requires the use not only of medical but of special psychological, educational, and social resources.

The characteristic signs most often observed are chronic history of short attention span, distractibility, emotional lability, impulsivity, and moderate to severe hyperactivity; specific learning disabilities; perceptual motor impairment; minor neurological signs and abnormal EEG. The diagnosis of MBD must be based upon a complete history and evaluation of the child and not solely on the presence of one or more of these signs.

Drug treatment is not indicated for all children with MBD. Appropriate educational placement is essential and psychological or social intervention may be necessary. When remedial measures alone are insufficient, the decision to prescribe stimulant medication will depend upon the physician's assessment of the chronicity and severity of the child's symptoms.

CONTRAINDICATIONS

Marked anxiety, tension, and agitation, since Ritalin may aggravate these symptoms. Also contraindicated in patients known to be hypersensitive to the drug and in patients with glaucoma.

WARNINGS

Ritalin is not recommended for children under six years, since safety and efficacy in this age group have not been established.

Since sufficient data on safety and efficacy of long-term use of Ritalin in children with minimal brain dysfunction are not yet available, those requiring long-term therapy should be carefully monitored.

Ritalin should not be used for severe depression of either exogenous or endogenous origin or for the prevention of normal fatigue states.

Ritalin may lower the convulsive threshold in patients with or without prior seizures; with or without prior EEG abnormalities, even in absence of seizures. Safe concomitant use of anticonvulsants and Ritalin has not been established. If seizures occur, Ritalin should be discontinued.

Use cautiously in patients with hypertension.

Drug Interactions

Ritalin may decrease the hypotensive effect of guanethidine. Use cautiously with pressor agents and MAO inhibitors. Ritalin may inhibit the metabolism of coumarin anticoagulants, anticonvulsants (phenobarbital, diphenylhydantoin, primidone), phenylbutazone, and tricyclic antidepressants (imipramine, desipramine). Downward dosage adjustments of these drugs may be required when given concomitantly with Ritalin.

Usage in Pregnancy

Adequate animal reproduction studies to establish safe use of Ritalin during pregnancy have not been conducted. Therefore, until more information is available, Ritalin should not be prescribed for women of childbearing age unless, in the opinion of the physician, the potential benefits outweigh the possible risks.

Drug Dependence

Ritalin should be given cautiously to emotionally unstable patients, such as those with a history of drug dependence or alcoholism, because such patients may increase dosage on their own initiative.

Chronically abusive use can lead to marked tolerance and psychic dependence with varying degrees of abnormal behavior. Frank psychotic episodes can occur, especially with parenteral abuse. Careful supervision is required during drug withdrawal, since severe depression as well as the effects of chronic overactivity can be unmasked. Long-term follow-up may be required because of the patient's basic personality disturbances.

PRECAUTIONS

Patients with an element of agitation may react adversely; discontinue therapy if necessary. Periodic CBC and platelet counts are advised during prolonged therapy.

ADVERSE REACTIONS

Nervousness and insomnia are the most common adverse reactions but are usually controlled by reducing dosage and omitting the drug in the afternoon or evening. Other reactions include: hypersensitivity (including skin rash, urticaria, fever, arthralgia, exfoliative dermatitis, and erythema multiforme with histopathological findings of necrotizing vasculitis); anorexia; nausea; dizziness; palpitations; headache; dyskinesia; drowsiness; blood pressure and pulse changes, both up and down; tachycardia; angina; cardiac arrhythmias; abdominal pain; weight loss during prolonged therapy. In children, loss of appetite, abdominal pain, weight loss during prolonged therapy, insomnia, and tachycardia may occur more frequently. Toxic psychosis has been reported.

DOSAGE AND ADMINISTRATION

Children with Minimal Brain Dysfunction (6 years and over)

Start with small doses (*eg*, 5 mg before breakfast and lunch) with gradual increments of 5 to 10 mg weekly. Daily dosage above 60 mg is not recommended. If improvement is not observed after appropriate dosage adjustment over a one-month period, the drug should be discontinued.

If paradoxical aggravation of symptoms or other adverse effects occur, reduce dosage, or, if necessary, discontinue the drug.

Ritalin should be periodically discontinued to assess the child's condition. Improvement may be sustained when the drug is either temporarily or permanently discontinued.

Drug treatment should not and need not be indefinite and usually may be discontinued after puberty.

HOW SUPPLIED

Tablets, 20 mg (peach, scored); bottles of 100 and 1000.
Tablets, 10 mg (pale green, scored); bottles of 100, 500. 1000 and Strip Dispensers of 100.
Tablets, 5 mg (pale yellow); bottles of 100, 500, and 1000.

Consult complete product literature before prescribing.

CIBA Pharmaceutical Company
Division of CIBA-GEIGY Corporation
Summit, New Jersey 07901

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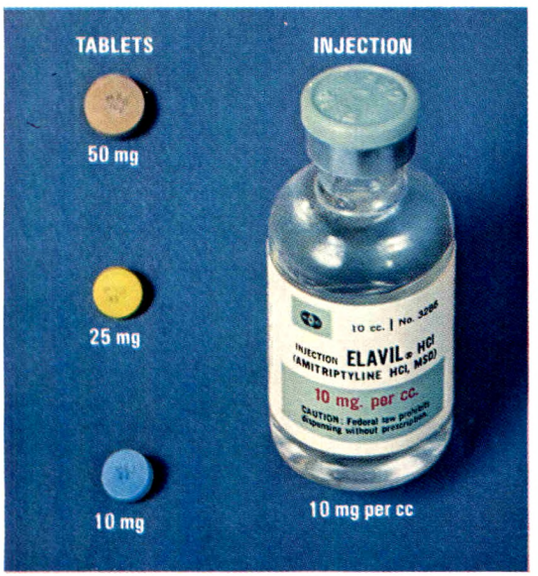
Ritalin®
(methylphenidate)
only when medication is indicated

CIBA

No two depressed patients are exactly alike...



..but for many patients with clinically significant depression you'll find a useful dosage form of



ELAVIL®
(AMITRIPTYLINE HCl | MSD)

NOTE: Not recommended during the acute recovery phase following myocardial infarction. Patients with cardiovascular disorders should be watched closely; arrhythmias, sinus tachycardia, and prolongation of the conduction time have been reported, particularly with high doses; myocardial infarction and stroke have been reported with drugs of this class. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. Concurrent electroshock therapy may increase the hazards of therapy; such treatment should be limited to patients for whom it is essential. Discontinue the drug several days before elective surgery if possible. Should not be given to patients who have received an MAOI within two weeks.

Contraindications: Known hypersensitivity. Should not be given concomitantly with a monoamine oxidase inhibitor or within at least 14 days following the discontinuance of a monoamine oxidase inhibitor since hyperpyretic crises, severe convulsions, and deaths have occurred. When used to replace a monoamine oxidase inhibitor, initiate dosage of amitriptyline HCl cautiously with gradual increase in dosage until optimum response is achieved. Not recommended during the acute recovery phase following myocardial infarction or for patients under 12 years of age.

Warnings: May block the antihypertensive action of guanethidine or similarly acting compounds. Should be used with caution in patients with a history of seizures or urinary retention, or with angle-closure glaucoma or increased intraocular pressure. Patients with cardiovascular disorders should be watched closely; arrhythmias, sinus tachycardia, and prolongation of the conduction time have been reported, particularly with high doses; myocardial infarction and stroke have been reported with drugs of this class. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. May impair mental and/or physical abilities required for performance of hazardous tasks, such as operating machinery or driving a motor vehicle. Safe use during pregnancy and lactation has not been established; in pregnant patients, nursing mothers, or women who may become pregnant, weigh possible benefits against possible hazards to mother and child.

Precautions: Schizophrenic patients may develop increased symptoms of psychosis; patients with paranoid symptomatology may have an exaggeration of such symptoms; manic depressive patients may experience a shift to the manic phase. In these circumstances, the dose of amitriptyline HCl may be reduced or a major tranquilizer, such as perphenazine, may be administered concurrently.
When given with anticholinergic agents or sympathomimetic drugs, close supervision and careful adjustment of dosages are required. Use cautiously in patients receiving large doses of ethchlorvynol, since transient delirium has been reported on concurrent administration. May enhance the response to alcohol and the effects of barbiturates and other CNS depressants. The possibility of suicide in depressed patients remains during treatment and until significant remission occurs; this type of patient should not have easy access to large quantities of the drug. Concurrent electroshock therapy may increase the hazards associated with such therapy; such treatment should be limited to patients for whom it is essential. When possible, discontinue the drug several days before elective surgery. Both elevation and lowering of blood sugar levels have been reported.

Adverse Reactions: *Note:* Included in this listing are a few adverse reactions not reported with this specific drug. However, pharmacological similarities among the tricyclic antidepressant drugs require that each reaction be considered when amitriptyline is administered. *Cardiovascular:* Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus. *Anticholinergic:* Dry mouth, blurred vision, disturbance of accommodation, constipation, paralytic ileus, urinary retention, dilatation of urinary tract. *Allergic:* Skin rash, urticaria, photosensitization, edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis, leukopenia, eosinophilia, purpura, thrombocytopenia. *Gastrointestinal:* Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, parotid swelling, black tongue. *Endocrine:* Testicular swelling and gynecomastia in the male, breast enlargement and galactorrhea in the female, increased or decreased libido, elevation and lowering of blood sugar levels. *Other:* Dizziness, weakness, fatigue, headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, drowsiness, jaundice, alopecia. *Withdrawal Symptoms:* Abrupt cessation of treatment after prolonged administration may produce nausea, headache, and malaise; these are not indicative of addiction.

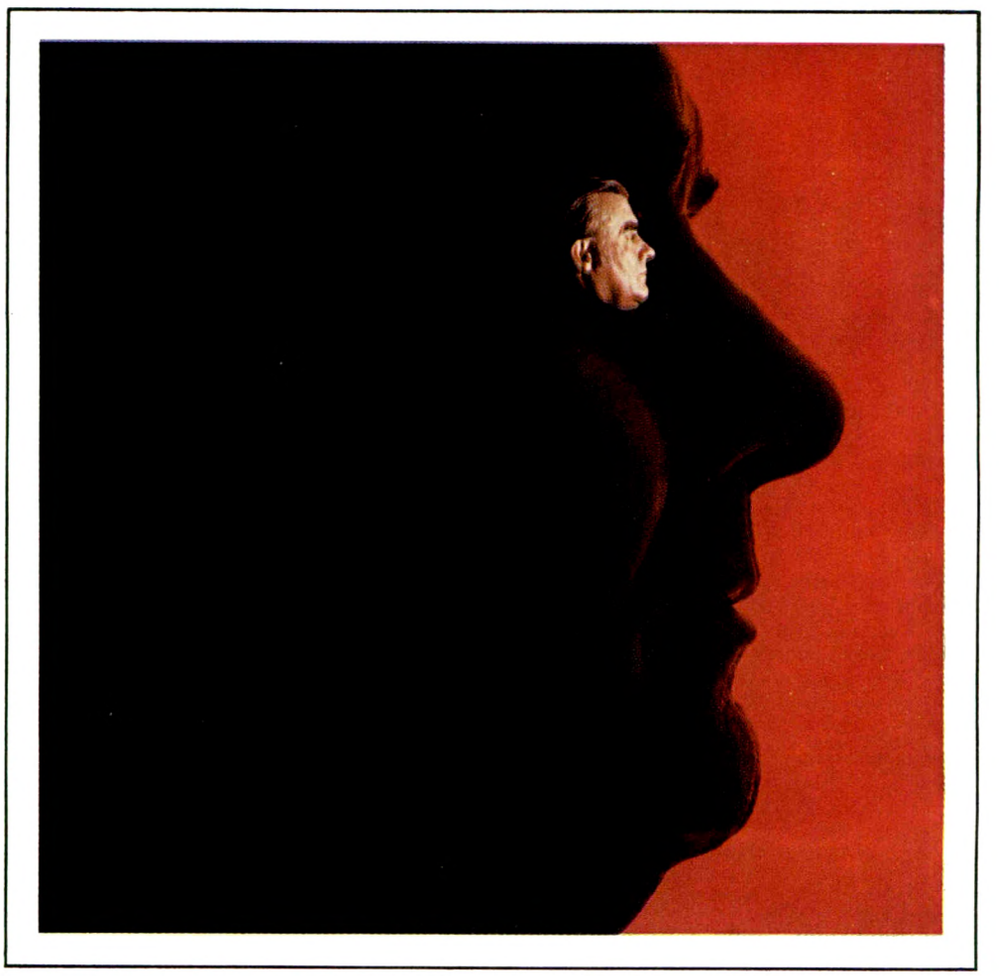
Overdosage: The intravenous administration of 1–3 mg of physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning.

How Supplied: Tablets containing 10 mg and 25 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100, 1000, and 5000; tablets containing 50 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100 and 1000; for intramuscular use, in 10-ml vials containing per ml: 10 mg amitriptyline HCl, 44 mg dextrose, 1.5 mg methylparaben and 0.2 mg propylparaben as preservatives, and water for injection q.s. 1 ml.

MSD
MERCK SHARP & DOHME

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

BASIC ANXIETIES OF TODAY'S NEUROTIC PATIENT



The Inadequate Self

Low Self-Esteem... High Levels of Anxiety

When the neurotic patient thinks of himself—and he tends to be excessively introspective—his thoughts often represent an extreme self-judgment, a condemning of himself. Characteristically, the neurotic is controlled by self-defining patterns of thoughts inadequately (or pathologically) developed in childhood. (In many cases, his negative self-evaluation stems from the internalization of early parental contempt.) Now, as an adult, he still sees himself as puny, weak, ineffectual, even worthless. Moreover, he lives in a constantly changing, extraordinarily complex and dehumanizing society which, unlike the societies of more stable eras, tends to *deepen* the individual's feelings of inadequacy and helplessness—his inability to cope with stress and to make decisions.

Because the neurotic patient's self-image may be poor, he takes great pains to conceal his presumed inadequacies from others, and their evaluations of his behavior can assume enormous importance. Furthermore, any real, or imagined, disapproval from others tends to induce disproportionately high levels of immobilizing anxiety.

In such cases, the neurotic patient may find himself in a peculiar kind of trap: severe anxiety—with its handicapping effect on both performance and concentration—may reinforce his sense of inadequacy and thus help perpetuate his already ingrained, habitual low self-esteem.

Librium (chlordiazepoxide HCl) In Today's Psychiatric Practice

In many such cases—when the patient's anxiety is, in the therapist's opinion, severely distressing and disabling—Librium (chlordiazepoxide HCl) often becomes a highly useful adjunct to psychotherapy. A dependable, effective antianxiety agent, Librium generally helps keep the neurotic patient's anxiety at tolerable levels, until such medication is no longer required. In addition, the calming influence of Librium may help the patient remain significantly less tense and apprehensive *between* counseling sessions—and may thus help to restore effective performance. In general use, the most common side effects reported have been drowsiness, ataxia and confusion, particularly in the elderly and debilitated. (See summary of prescribing information.)

Librium®
(chlordiazepoxide HCl) 10-mg, 25-mg capsules up to 100 mg daily in severe anxiety

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.
Contraindications: Patients with known hypersensitivity to the drug.
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.
Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.
Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.
Supplied: Librium Capsules containing 5 mg, 10 mg or 25 mg chlordiazepoxide HCl. Libritabs® Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.

ROCHE
Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110


You've talked...
you've listened...
but here she is again.

Looks like chronic anxiety.* Looks like a case for

Stelazine®

brand of **trifluoperazine HCl 2 mg. tablets**

For mildly anxious patients, your reassurance and some friendly advice will often carry the patient through the anxious episode.

But for chronic neurotic anxiety—the patient for whom anxiety is a constant part of life—medication may be required.

'Stelazine' can provide incisive control of anxiety, let the patient function more normally, and make her more receptive to your counsel.

* 'Stelazine' has been evaluated as possibly effective for this indication. See Brief Summary.

Before prescribing, see complete prescribing information, including dosage and symptoms and treatment of overdosage, in SK&F literature or *PDR*.

* **Indications**

Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: For the management of the manifestations of psychotic disorders.

Possibly effective: To control excessive anxiety, tension and agitation as seen in neuroses or associated with somatic conditions.

Final classification of the less-than-effective indications requires further investigation.

Contraindications: Comatose or greatly depressed states due to C.N.S. depressants; blood dyscrasias; bone marrow depression; liver damage.

Warnings: Caution patients about activities requiring alertness (e.g., operating vehicles or machinery), especially during the first few days' therapy.

Use in pregnancy only when necessary for patient's welfare.

Precautions: Use cautiously in angina. Avoid high doses and parenteral administration when cardiovascular system is impaired. Antiemetic effect may mask signs of toxic drug overdosage or physical disorders. Additive effect is possible with other C.N.S. depressants. Prolonged administration of high doses may result in cumulative effects with severe C.N.S. or vasomotor symptoms. If retinal changes occur, discontinue drug. Agranulocytosis, thrombocytopenia, pancytopenia, anemia, cholestatic jaundice, liver damage have been reported.

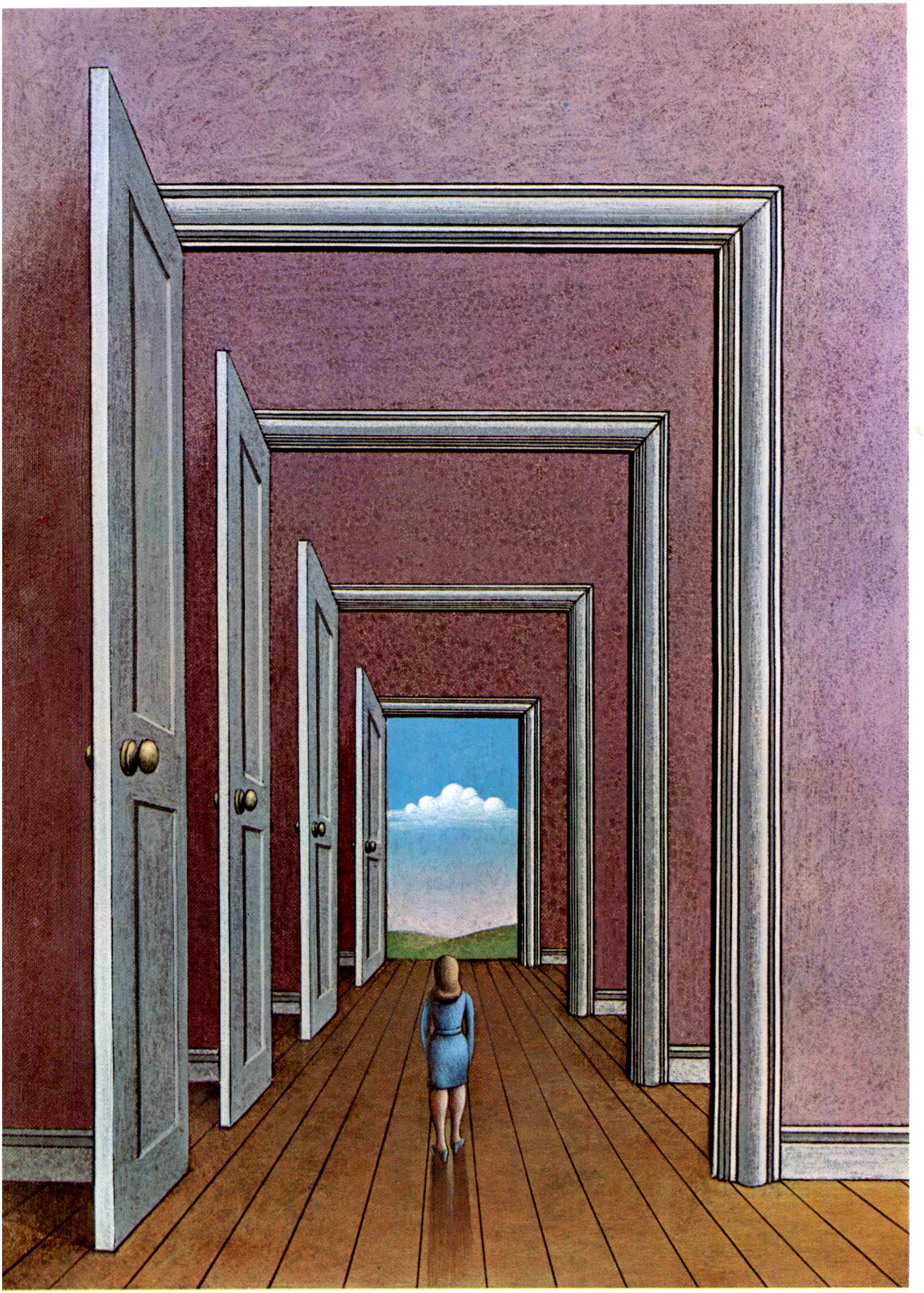
Adverse Reactions: Drowsiness, dizziness, skin reactions, rash, dry mouth, insomnia, amenorrhea, fatigue, muscular weakness, anorexia, lactation, blurred vision. Neuromuscular (extrapyramidal) reactions: motor restlessness, dystonias, pseudo-parkinsonism, persistent tardive dyskinesia.

Other adverse reactions reported with Stelazine (trifluoperazine HCl, SK&F) or other phenothiazines: Some adverse effects are more frequent or intense in specific disorders (e.g., mitral insufficiency or pheochromocytoma).

Grand mal convulsions; altered cerebrospinal fluid proteins; cerebral edema; prolongation and intensification of the action of C.N.S. depressants, atropine, heat, and organophosphorus insecticides; nasal congestion, headache, nausea, constipation, obstipation, adynamic ileus, inhibition of ejaculation; reactivation of psychotic processes, catatonic-like states; hypotension (sometimes fatal); cardiac arrest; leukopenia, eosinophilia, pancytopenia, agranulocytosis, thrombocytopenic purpura; jaundice, biliary stasis; menstrual irregularities, galactorrhea, gynecomastia, false positive pregnancy tests; photosensitivity, itching, erythema, urticaria, eczema up to exfoliative dermatitis; asthma, laryngeal edema, angioneurotic edema, anaphylactoid reactions; peripheral edema; reversed epinephrine effect; hyperpyrexia; a systemic lupus erythematosus-like syndrome; pigmentary retinopathy; with prolonged administration of substantial doses, skin pigmentation, epithelial keratopathy, and lenticular and corneal deposits. EKG changes have been reported, but relationship to myocardial damage is not confirmed. Discontinue long-term, high-dose therapy gradually. NOTE: Sudden death in patients taking phenothiazines (apparently due to cardiac arrest or asphyxia due to failure of cough reflex) has been reported, but no causal relationship has been established.

Supplied: Tablets, 1 mg., 2 mg., 5 mg. and 10 mg., in bottles of 100; Injection, 2 mg./ml.; and Concentrate, 10 mg./ml.

Manufactured and distributed by SK&F Co., Carolina, P.R. 00630, under Stelazine® trademark license from Smith Kline & French Laboratories, Philadelphia, Pa



A24

A HEAD START FOR THE CLINICALLY DEPRESSED PATIENT.

All tricyclic antidepressants take from one to four weeks before optimal antidepressant effect is seen.

Sinequan (doxepin HCl)—the newest tricyclic antidepressant—is no exception.

But, in that waiting period, Sinequan alone offers the clinically depressed patient both:

prompt sedative activity to begin relieving the sleep disturbances often characteristic of depression, and

marked antianxiety activity to help relieve the apprehension, tension, worry and fear that usually accompany depression.

Further, the incidence of cardiovascular side effects with Sinequan is relatively low. Tachycardia and hypotension are infrequent. (Drowsiness is the most common side effect.) And Sinequan, unlike other tricyclic antidepressants, does not generally affect the activity of guanethidine and similarly acting compounds at usual clinical doses.

Prompt sedative activity. Marked antianxiety activity. Low incidence of cardiovascular side effects.

It's a head start for the clinically depressed patient.

THE NEWEST TRICYCLIC ANTIDEPRESSANT— WITH DIFFERENCES YOU CAN SEE.

Sinequan®
DOXEPIN HCl
25-mg. and 50-mg. capsules

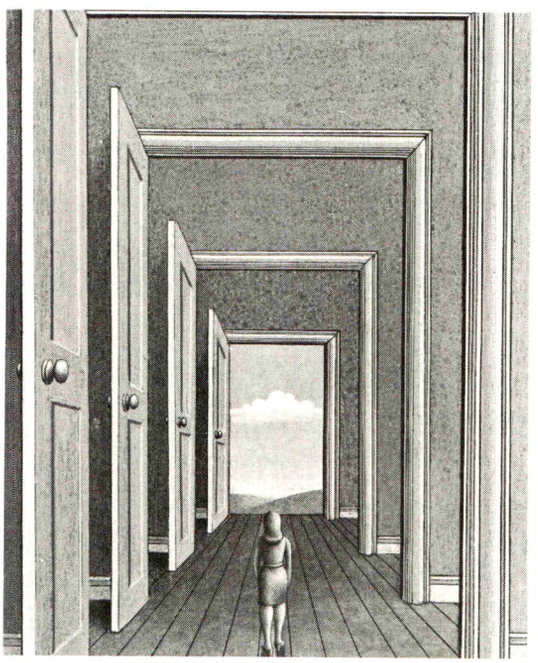
Pfizer **LABORATORIES DIVISION**
PFIZER INC.

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(See Brief Summary on following page for information on adverse reactions, contraindications, warnings and precautions.)

Sinequan®
DOXEPIN HCl
25-mg. and 50-mg. capsules

THE NEWEST TRICYCLIC ANTIDEPRESSANT–WITH DIFFERENCES YOU CAN SEE.



BRIEF SUMMARY

Sinequan® (doxepin HCl) **Capsules**

Contraindications. Sinequan (doxepin HCl) is contraindicated in individuals who have shown hypersensitivity to the drug.

Sinequan (doxepin HCl) is contraindicated in patients with glaucoma or a tendency to urinary retention.

Warnings. *Usage in Pregnancy:* Sinequan (doxepin HCl) has not been studied in the pregnant patient. It should not be used in pregnant women unless, in the judgment of the physician, it is essential for the welfare of the patient, although animal reproductive studies have not resulted in any teratogenic effects.

Usage in Children: The use of Sinequan (doxepin HCl) in children under 12 years of age is not recommended, because safe conditions for its use have not been established.

MAO Inhibitors: Serious side effects and even death have been reported following the concomitant use of certain drugs with MAO inhibitors. Therefore, MAO inhibitors should be discontinued at least two weeks prior to the cautious initiation of therapy with Sinequan (doxepin HCl). The exact length of time may vary and is dependent upon the particular MAO inhibitor being used, the length of time it has been administered, and the dosage involved.

Precautions. Since drowsiness may occur with the use of this drug, patients should be warned of that possibility and cautioned against driving a car or operating dangerous machinery while taking this drug.

Patients should also be cautioned that their response to alcohol may be potentiated.

Since suicide is an inherent risk in any depressed patient and may remain so until significant improvement has occurred, patients should be closely supervised during the early course of therapy.

Although Sinequan (doxepin HCl) has significant tranquilizing activity, the possibility of activation of psychotic symptoms should be kept in mind.

Other structurally related psychotherapeutic agents (e.g., iminodibenzyls and dibenzocycloheptenes) are capable of blocking the effects of guanethidine and similarly acting compounds in both the animal and man. Sinequan (doxepin HCl), however, does not show this effect in animals. At the usual clinical dosage, 75 to 150 mg. per day, Sinequan (doxepin HCl) can be given concomitantly with guanethidine and related compounds without blocking the antihypertensive effect. At doses of 300 mg. per day or above, Sinequan (doxepin HCl) does exert a significant blocking effect. In addition, Sinequan (doxepin HCl) was similar to the other structurally related psychotherapeutic agents as regards its ability to potentiate norepinephrine response in the animal. However, in the human this effect was not seen. This is in agreement with the low incidence of the side effect of tachycardia seen clinically.

Adverse Reactions. *Anticholinergic Effects:* Dry mouth, blurred vision, and constipation have been reported. They are usually mild, and often subside with continued therapy or reduction of dose.

Central Nervous System Effects: Drowsiness has been observed. This usually occurs early in the course of treatment, and tends to disappear as therapy is continued.

Cardiovascular Effects: Tachycardia and hypotension have been reported infrequently.

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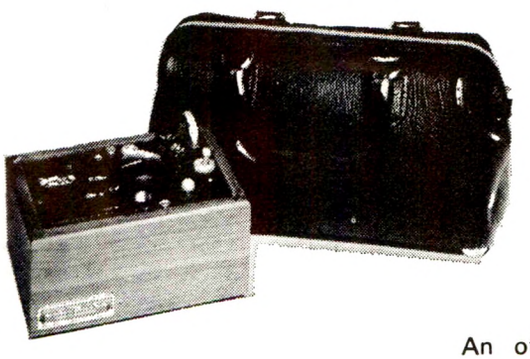
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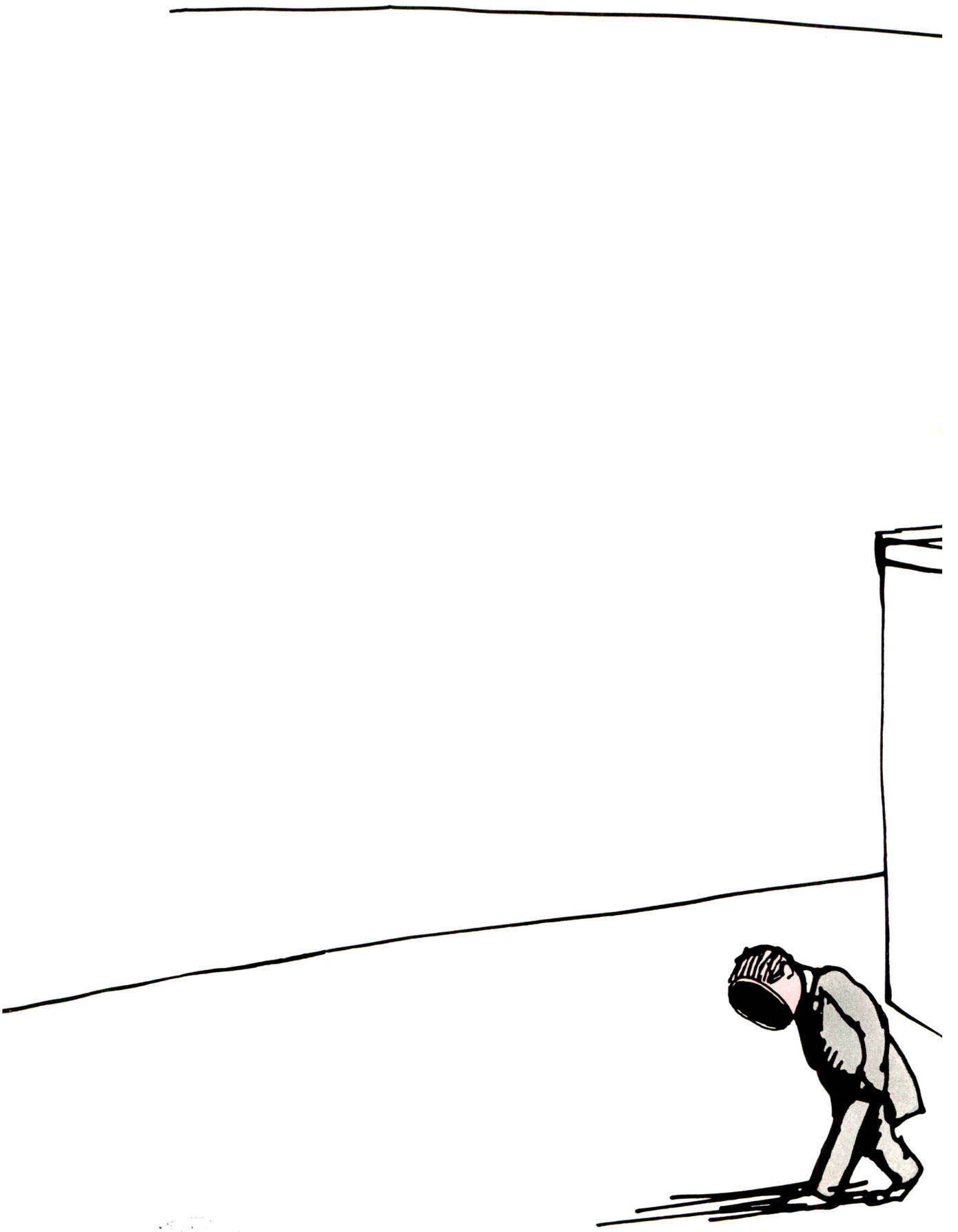
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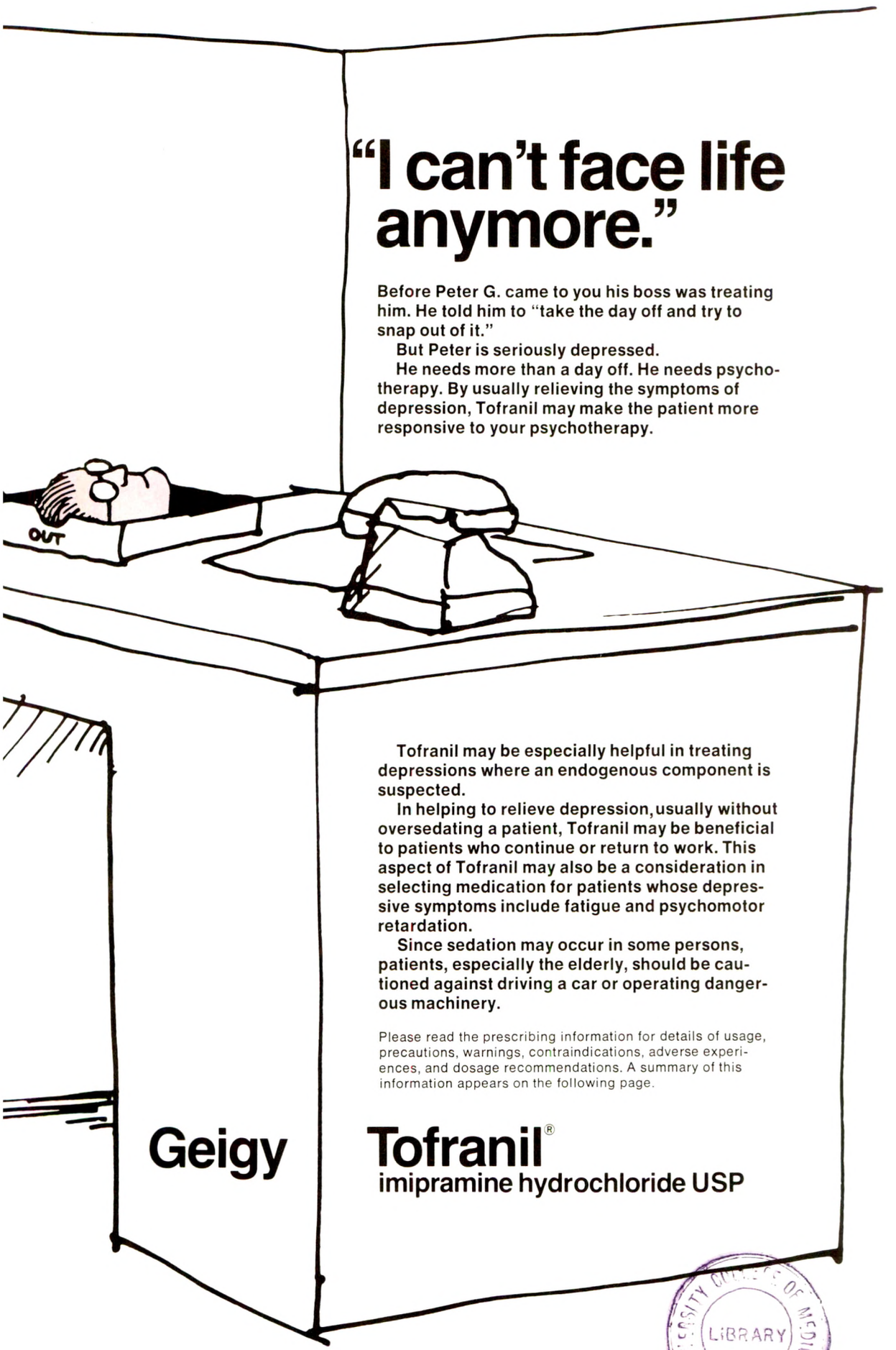
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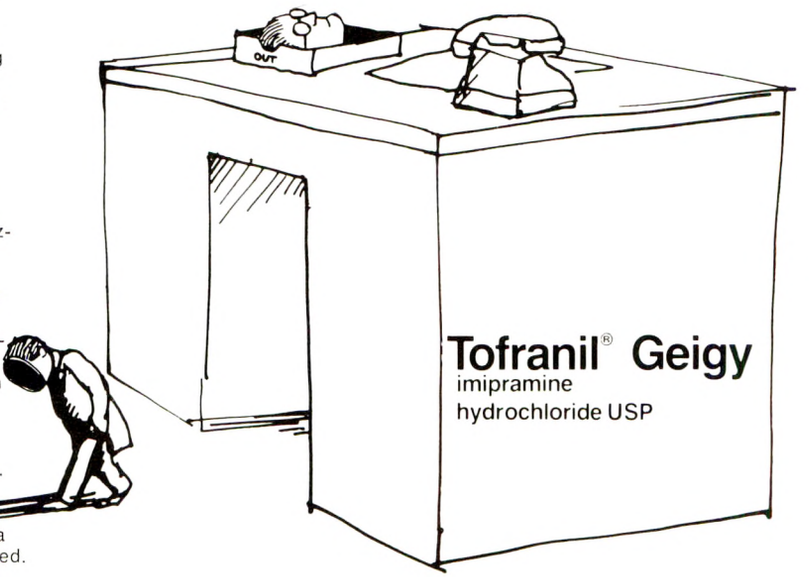
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- patients with cardiovascular disease because of the possibility of conduction defects, arrhythmias, myocardial infarction, strokes and tachycardia;
- patients with increased intraocular pressure, history of urinary retention, or history of narrow-angle glaucoma because of the drug's anticholinergic properties;
- hyperthyroid patients or those on thyroid medication because of the possibility of cardiovascular toxicity;
- patients with a history of seizure disorder because this drug has been shown to lower the seizure threshold;
- patients receiving guanethidine or similar agents since imipramine may block the pharmacologic effects of these drugs.

Usage in Children: Pending evaluation of results from clinical trials in children, the drug is not recommended for use in patients under twelve years of age.

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Hypomanic or manic episodes may occur, particularly in patients with cyclic disorders. Such reactions may necessitate discontinuation of the drug. If needed, imipramine may be resumed in lower dosage when these episodes are relieved. Administration of a tranquilizer may be useful in controlling such episodes.

Prior to elective surgery, imipramine should be discontinued for as long as the clinical situation will allow.

An activation of the psychosis may occasionally be observed in schizophrenic patients and may require reduction of dosage and the addition of a phenothiazine.

In occasional susceptible patients or in those receiving anticholinergic drugs (including antiparkinsonism agents) in addition, the atropine-like effects may become more pronounced (e.g. paralytic ileus). Close supervision and careful adjustment of dosage is required when this drug is administered concomitantly with anticholinergic or sympathomimetic drugs.

Patients should be warned that the concomitant use of alcoholic beverages may be associated with exaggerated effects.

Both elevation and lowering of blood sugar levels have been reported.

Concurrent administration of imipramine with electroshock therapy may increase the hazards; such treatment should be limited to those patients for whom it is essential.

Adverse Reactions: *Cardiovascular:* Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke, falls.

Psychiatric: Confusional states (especially in the elderly) with hallucinations, disorientation, delusions; anxiety, restlessness, agitation; insomnia and nightmares; hypomania; exacerbation of psychosis.

Neurological: Numbness, tingling, paresthesias of extremities; incoordination, ataxia, tremors; peripheral neuropathy; extrapyramidal symptoms; seizures, alterations in EEG patterns; tinnitus.

Anticholinergic: Dry mouth, and, rarely, associated sublingual adenitis; blurred vision, disturbances of accommodation, mydriasis; constipation, paralytic ileus; urinary retention, delayed micturition, dilation of the urinary tract.

Allergic: Skin rash, petechiae, urticaria, itching, photosensitization (avoid excessive exposure to sunlight); edema (general or of face and tongue), drug fever, cross-sensitivity with desipramine.

Hematologic: Bone marrow depression including agranulocytosis; eosinophilia; purpura; thrombocytopenia. Leukocyte and differential counts should be performed in any patient who develops fever and sore throat during therapy; the drug should be discontinued if there is evidence of pathological neutrophil depression.

Gastrointestinal: Nausea and vomiting, anorexia, epigastric distress, diarrhea; peculiar taste, stomatitis, abdominal cramps, black tongue.

Endocrine: Gynecomastia in the male; breast enlargement and galactorrhea in the female; increased or decreased libido, impotence; testicular swelling; elevation or depression of blood sugar levels.

Other: Jaundice (simulating obstructive); altered liver function; weight gain or loss; perspiration; flushing; urinary frequency; drowsiness, dizziness, weakness and fatigue; headache; parotid swelling; alopecia.

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introduction by Margaret Mead

biographical note by George L. Engel, M.D.

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Thursday, March 8, 1973

8:00 a.m. Registration

9:15 a.m. Welcome

9:40 a.m. Moderator: Dr. Herbert Freed
"BEHAVIOR THERAPY WITH PRE-DELINQUENT BOYS"
Direct Intervention in the Home of Pre-delinquent Boys — "Stealers vs. Non-stealers"
Video-tape Presentation
Presentor: John Reid, Ph.D., Research Associate
Oregon Research Institute, Eugene, Oregon
Discussants: Jay Haley, Ph.D., Director of Family Research
Child Guidance Clinic, Philadelphia, Pennsylvania
Melvin Heller, M.D., Clinical Professor of Psychiatry
Temple University Medical School, Philadelphia, Pennsylvania

1:30 p.m. Moderator: Max C. Pepernik, M.D., Acting Chairman, Department of Psychiatry, Temple University Medical School
"FAMILY THERAPY" (New Training Film)
Presentor: Jay Haley, Ph.D., Director of Family Research, Child Guidance Clinic
Discussants: Anita Lichtenstein, M.S.W., Coordinator of Family Therapy, Albert Einstein Community Mental Health Center, Philadelphia, Pennsylvania
David Rubinstein, M.D., Associate Professor of Psychiatry, Temple University Medical School
John Reid, Ph.D., Research Associate, Oregon Research Institute

Friday, March 9, 1973

9:00 a.m. Registration

9:30 a.m. Moderator: Harold Winn, M.D., Clinical Associate Professor of Psychiatry, Temple University Medical School
"BEHAVIOR THERAPY OF SEXUAL DISORDERS"
Reciprocal Effects on Marital Interaction
Video-tape Presentation
Presentor: Dennis Munjack, M.D., Instructor in Psychiatry, Temple University School of Medicine
Discussants: Howard Osofsky, M.D., Professor of Obstetrics and Gynecology, Temple University Medical School
Joseph Wolpe, M.D., Professor of Psychiatry, Temple University Medical School

1:30 p.m. Moderator: Dr. Maurie Pressman, Chairman, Division of Psychiatry, Albert Einstein Medical Center
"BEHAVIOR THERAPY WITH FAMILIES AND CHILDREN"
Skinnerian and Pavlovian Approaches
Video-tape Presentation
Presentor: William Allen, M.D., Director of Training, Child Psychiatry Unit, Albert Einstein Medical Center
Discussants: Debora Phillips, M.S., Clinical Instructor in Psychiatry (Drama Therapy), Temple University Medical School
Michael Goldblatt, Ph.D., Clinical Instructor in Psychiatry (Child Psychology), Temple University Medical School-St. Christopher's Hospital for Children
Discussants: Joseph Wolpe, M.D., Professor of Psychiatry, Temple University Medical School-St. Christopher's Hospital
Kenneth H. Gordon, Jr., M.D., Clinical Associate Professor of Psychiatry (Child Psychiatry), Temple University Medical School-St. Christopher's Hospital for Children
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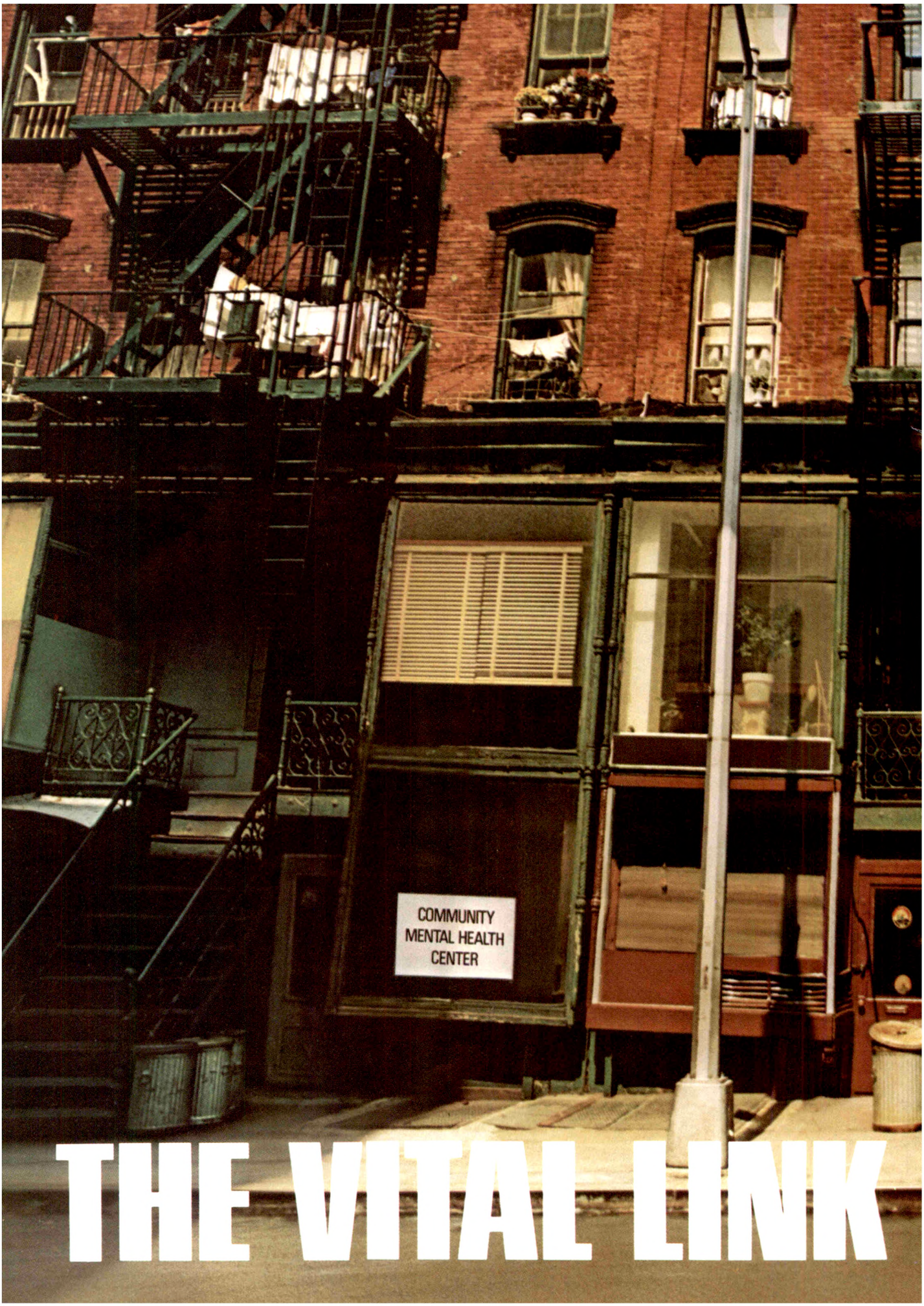
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Contraindications: Severe central nervous system depression, comatose states from any cause, hypertensive or hypotensive heart disease of extreme degree.

Warnings: Administer cautiously to patients who have previously exhibited a hypersensitivity reaction (e.g., blood dyscrasias, jaundice) to phenothiazines. Phenothiazines are capable of potentiating central nervous system depressants (e.g., anesthetics, opiates, alcohol, etc.) as well as atropine and phosphorus insecticides. During pregnancy, administer only when the potential benefits exceed the possible risks to mother and fetus.

Precautions: There have been infrequent reports of leukopenia and/or agranulocytosis and convulsive seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmentary retinopathy may be avoided by remaining within the recommended limits of dosage. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., driving), and increase dosage gradually. Orthostatic hypotension is more common in females than in males. Do not use epinephrine in treating drug-induced hypotension since phenothiazines may induce a reversed epinephrine effect on occasion. Daily doses in excess of 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: *Central Nervous System*—Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. *Autonomic Nervous System*—Dryness of mouth, blurred vision, constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. *Endocrine System*—Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. *Skin*—Dermatitis and skin eruptions of the urticarial type, photosensitivity. *Cardiovascular System*—ECG changes (see *Cardiovascular Effects* below). *Other*—A single case described as parotid swelling.

The following reactions have occurred with phenothiazines and should be considered: *Autonomic Reactions*—Miosis, obstipation, anorexia, paralytic ileus. *CutaneousReactions*—Erythema, exfoliative dermatitis, contact dermatitis. *Blood Dyscrasias*—Agranulocytosis, leukopenia, eosinophilia, thrombocytopenia, anemia, aplastic anemia, pancytopenia. *Allergic Reactions*—Fever, laryngeal edema, angioneurotic edema, asthma. *Hepatotoxicity*—Jaundice, biliary stasis. *Cardiovascular Effects*—Changes in terminal portion of electrocardiogram, including prolongation of Q-T interval, lowering and inversion of T-wave, and appearance of a wave tentatively identified as a bifid T or a U wave have been observed with phenothiazines, including Mellaril (thioridazine); these appear to be reversible and due to altered repolarization, not myocardial damage. While there is no evidence of a causal relationship between these changes and significant disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients showing characteristic electrocardiographic changes while taking the drug. While proposed, periodic electrocardiograms are not regarded as predictive. Hypotension, rarely resulting in cardiac arrest. *Extrapyramidal Symptoms*—Akathisia, agitation, motor restlessness, dystonic reactions, trismus, torticollis, opisthotonus, oculogyric crises, tremor, muscular rigidity, and akinesia, occasionally persisting for several months or years especially in elderly patients with brain damage. *Endocrine Disturbances*—Menstrual irregularities, altered libido, gynecomastia, weight gain, false positive pregnancy tests. *Urinary Disturbances*—Retention, incontinence. *Others*—Hyperpyrexia; behavioral effects suggestive of a paradoxical reaction, including excitement, bizarre dreams, aggravation of psychoses, and toxic confusional states; following long-term treatment, a peculiar skin-eye syndrome marked by progressive pigmentation of skin or conjunctiva and/or accompanied by discoloration of exposed sclera and cornea; stellate or irregular opacities of anterior lens and cornea.

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THE AMERICAN JOURNAL OF PSYCHIATRY

Social Systems and the Criteria of Health as Defined by the World Health Organization

BY ANDRZEJ JUS, M.D.

The main reason for the great discrepancy between the realization of the medical and the social criteria of health as defined by the WHO charter is the disproportion between the knowledge of technical sciences and of human nature. This is relevant to various social systems. There are in addition specific reasons for the discrepancies existing in Communist countries; such reasons include the practical difficulties inherent in creating a new human consciousness in a revolutionary way, a sharpening of the aggressive instincts by acceptance of the dogma of the class struggle, lack of an adequate communication system between the party and the population, and the instability of the value system, leading to a feeling of insecurity. Scientists of various disciplines represent the most productive social forces in society; they should play an important role in designing a unitary system of self-government for mankind.

AS THERE WILL BE SOME PESSIMISTIC REMARKS in what I am presenting here, let me at least start with an optimistic quotation from Julian Huxley (1): "The world has become a unit de facto: sooner rather than later it must become a unit de jure, by submitting itself to a unitary system of self-government."

However, Julian Huxley, as a scientist, was accustomed to think in terms of units of time measured by centuries; people of our profession are used to measuring time by the span of a human life or at the most a few generations. The progress of biological and technical science and the speed of political events is much more rapid than the evolution of the knowledge of human nature and the acceptance of humanistic ideals. Welch (2), summarizing a scientific symposium on aggressive behavior, wrote: "Those who are interested in making human social conditions more stable and wholesome will be particularly interested in the ability of environmental and situational factors to encourage the expression of aggressiveness in creative and beneficial ways. But our knowledge is yet only tentative and superficial. Our journey has only barely begun."

The achievements of contemporary experimental psychopharmacology, neurophysiology, and neurosurgery have important medical applications in psychic disorders, epilepsy, intractable pain, and involuntary movements. Such experiments, involving the stimulation or ablation of certain brain structures—for instance the amygdaloid and hypothalamic structures involved in aggressive behavior—contribute to our knowledge of brain mechanisms in various kinds of behavior.

However, the vision of controlling disturbed behavior by means of drugs or implanted electrodes suggests something not only horrifying but also extremely dangerous. This danger should not be overestimated because, as Kety has remarked (3), "Manipulation of the brain by any of the biological techniques which could be developed in the foreseeable future would involve such drastic invasions of the privacy, integrity and rights of the individual that, in their application, behavioral control would have been achieved even if the electrodes carried no current and the pills were placebos." I would go a little farther and say that even without common consensus for neurosurgical procedures, some purely external stimuli, especially those which Pavlov used to call "stimuli of the second signalling system," i.e., words, if applied in special social systems, could provoke in humans effects similar to those obtained in monkeys by Delgado (4), who used very sophisticated telemetric methods. The difference is that Delgado knew how to stimulate the pleasure center.

There are great risks in the lag in developing knowledge of human nature, compared with the exploration of the external world. Thus, knowledge of atomic physics is in the possession of human beings whose nature is far from adequately explored. The technical efficiency of

Dr. Jus was Chairman of the Department of Psychiatry, Academy of Medicine, Warsaw, Poland. He is now Professor of Psychiatry, Research Division, Laval University, Hôpital St. Michel-Archange, Quebec 5, Canada.

weapons has been better perfected than the ethical efficiency of human beings.

RELEVANCE TO PSYCHIATRY

Why are psychiatrists interested in such very general problems? There is certainly no statistically significant difference in the concern about politics of the psychiatrist as compared with other physicians or other professionals. Our concern is, however, qualitatively different because our profession is at the junction of the biological, behavioral, and social sciences. Even a layman knows that some psychic disturbances are caused by cerebral alterations and some by psychological or social factors that influence the central nervous system and act through the brain as intermediary, causing various behavioral disorders.

This does not mean that I fully agree with Wedge (5), who claims that psychiatrists, who are expert at treating disorders and conflicts within and between human individuals, should be actively involved in international conferences and negotiations so as to help in the management of relations among nations. I simply do not believe that politicians have so much respect for psychiatrists that they will readily take their advice. Like Brody (6), I think that clinical psychiatrists cannot at present offer anything better than (or even as good as) what behavioral scientists trained in psychology and social sciences offer. Besides this, I do not think that relations among nations can be improved over the long run without improving the nature of human beings. This may seem very complicated, but an oversimplification of these concepts, or an attempt to change human nature by governmental or intergovernmental decree, may bring tragic consequences. I will deal with this problem later.

Psychiatrists are not sociologists, even if they talk a great deal about sociology; the converse is also true. I am convinced that it would be a great error to analyze crucial social factors only from the point of view of psychopathology or psychodynamics. Even if the rules governing psychological and those governing social factors are somewhat similar, there is a qualitative difference resulting from the historical, political, cultural, geographic, and economic determinants of human behavior. As psychiatrists we may be successful, using adequate psychological and sociological methods of therapy, in reducing tension in families or in small social groups. We often know how to diminish discord among human beings and make them, if not happy, at least less unhappy. This is, however, only an experimental model in laboratory dimensions. It is at least as difficult to apply this kind of therapy to large social organisms as it is to apply the results of experiments on animals to human beings. However, laboratory discoveries form the basis for progress both in industry and medicine. I believe therefore that as psychiatrists we could add some important theoretical considerations to the problems of discord—and on higher or broader social levels than single family groups or groups working in a factory.

As equal partners, psychiatrists can contribute to a comprehensive understanding of international affairs (7). Perhaps we are better able than other professionals to determine psychopathological factors influencing social attitudes toward wars (8).

WHO DEFINITION OF HEALTH

The importance of social factors is expressed in some definitions adopted by the international organizations dealing with medical problems. At the beginning of its existence the World Health Organization (WHO) adopted a very general definition of health which assumed that health is partly a social concept. The relevant passage from the WHO charter is as follows: "Health is a state of complete physical, mental and social well-being and not merely the absence of disease and infirmity." This is open to much criticism; I fully agree with Sir Aubrey Lewis (9) in his observation: "In describing health as a state of perfection, such as was enjoyed perhaps by archangels and by Adam before the Fall, the charter writers of the WHO were reverting to an ancient formula of unattainable wholeness of body, mind, and soul, realized in the Golden Age, but long since forfeited." Let me add only that the charter writers must have known very well that if we were to apply such criteria, it would be difficult if not impossible, mostly on the grounds of social criteria, to find a healthy person in the contemporary world.

The medical criteria of the WHO definition must be achieved by medical authorities who, of course, must rely on governments for adequate resources. Nowhere are these sufficient to the needs of the population. The reasons are different in different countries. In underdeveloped countries they include poverty, lack of money for the organization of health services, and lack of trained medical staff. In many wealthy capitalistic countries they include the lack of a system of nationwide medical care, the limitations of such a system in spite of advanced technological achievements, or simply poor organization. This is certainly tied up with the fact that national resources are allocated inadequately: more money goes to destructive than to humanistic activities. It is very important to make work in hospitals, outpatient departments, and research more attractive than one-to-one private treatment of a limited number of patients. This will open new perspectives in the reorganization of medical care in many Western countries, including the U.S.

In some Western countries (England, the Scandinavian countries), such organization is already very advanced and meets most of the needs. Many problems still remain unsolved because of practical difficulties.

PUBLIC MEDICAL CARE IN COMMUNIST COUNTRIES

In Communist countries the organization of public medical care is also very advanced. Routine services for

the entire population are based on principles of public health: free medical care, social welfare programs, and emphasis on fitness for work and on occupational and social adjustment. In the opinion of many Western psychiatrists, the public health model in the Communist countries has many advantages and is more advanced than in many Western countries (10–14). Kolb (10) emphasized the importance of outpatient departments in the Soviet organization of psychiatric care and wrote: "Other advantages of the Soviet system are: the guarantee of employment of patients on discharge; the provision that hospitals may pay families to care for the patient at home; the attachment of the psychiatrists to the dispensaries; the facility with which effective decisions and actions are made in regard to the economic, social, legal, and vocational life of the patient." To a certain extent these advantages are tied to the specific social system, but they do not seem to be incompatible with other social systems.

I will not discuss here whether good medicine is one of the positive elements of the Communist system or if, as suggested by Field (15), it results from the totalitarian concept that health, be it physical or mental, is an important strategic reserve. In my opinion we do not have sufficient data to analyze the complicated problem of the interference of human factors with a rational and at the same time cruel calculation, which might be true for any political system. I agree with another statement of Field, that objects seen from a distance look more undifferentiated and simple; only at closer range do they reveal their complexity (15). To put it in another way, I think that both theoretical humanitarian programs and practical (often cruel) reality affect government attitudes toward health problems.

Free medical treatment and such preventive measures as free education, the development of the vocational capacities of the young, and low unemployment are undoubted achievements of the Communist countries. Especially in psychiatry we can indicate a number of positive factors: extensive programs of outpatient treatment, intensive use of inpatient facilities, and free psychiatric care for everybody. But at the same time many factors inhibit the realization of all these principles. I will analyze here only those factors related to the social criteria of health.

Historical Factors

Let us not forget that many features of medical organization in the Soviet Union are the result of historical and cultural factors that are much older than the Communist system itself. Russian psychiatry in the nineteenth century was very humanitarian, and social attitudes toward mentally ill patients were very progressive. A strong trend toward community psychiatry already existed. There were small psychiatric wards as well as large mental hospitals. These factors have had an influence on contemporary Soviet psychiatry. On the other hand, in some other Communist countries it has been very difficult to change unfavorable public attitudes toward the mentally ill, to build community psychiatry, and to organize psychiatric wards in general hospitals. Once more we can see how important a retrospective study of cultural, sociological, economic, and other socially integrating or disintegrating factors is for an analysis of the development of psychiatry in a country (16–18).

Marxist Concepts

It is a pity that in this situation a dogmatic indoctrination may inhibit the progress of medical organization and research. Let me give some examples concerning psychiatry. According to the materialistic concept of Marx, there is nothing beyond matter. Probably because of that, great emphasis is laid on the organic etiology of many psychiatric disorders and there is some neglect of psychological factors such as interpersonal difficulties. This is especially true in child psychiatry. Somebody has forgotten (or was told to forget) that this contradicts another materialistic concept—that "social existence determines consciousness." This principle should be a strong stimulus for research on the influence of psychological and social factors on mental health.

Another example of such a contradiction concerns research in social psychiatry. The above-cited principle that "social existence determines consciousness" should stimulate research related to the influence of the new postrevolutionary social, economic, and cultural integration on the prevalence of psychiatric disorders. Such research is limited; it has been undertaken only in recent years and only in relation to some selected populations. In Poland, for instance, such research was started only ten years ago and has been limited to the influence of the migration of rural people to large industrial centers and the influence of industrialization on mental health. Somebody has forgotten (or was told to forget) about the differential influence of social factors on various social classes and especially the differing influences on the so-called "intelligentsia" and other social groups.

These examples show that although the purely medical criterion of health comes close to realization in Communist countries, there are some discrepancies that hamper the evolution of new trends in psychiatric treatment and research. Other questions concern whether the forms of organization of public medical care are adequate to the needs and the nature of the difficulties in realizing the basic principles of public health services. These important problems have to be discussed on a specific basis with specialists in medical organization.

DISCREPANCIES BETWEEN MEDICAL AND SOCIAL GOALS

However, the most interesting question involves the discrepancies between the realization of the purely medical and the social criteria of health. Such discrepancies exist in all systems that have adopted the principles of socialized medicine.

Of course in wealthy countries where no such system exists, a high percentage of the population is not only deprived of medical care but also of the feeling of social well-being. In underdeveloped countries, poverty limits

all possibility of such medical care. The wealthy countries that up to now have not developed an adequate system of public medical care will probably be forced to do so in the near future and to spend more money for health and social welfare. The underdeveloped countries still need help in this respect from international organizations.

However, the most intriguing question remains: Why are there discrepancies between the medical and social criteria of health in the Communist countries, which theoretically are based on the concept of the social well-being of the entire population? No other system promised so much in this field, and no other system has brought so many deceptions.

Maladaptation Not Always Pathological

Before discussing this problem in detail, let me make some comments on the expression "social well-being" in the WHO definition of health. Interpretations of these words may be varied and controversial. First, we must agree that without a good adaptation to the environment there is no possibility of social well-being. But social well-being, if conceived as the ability to adapt to a particular environmental or social structure, is not necessarily a criterion of health. The lack of adaptation to some social situations may even be an expression of personal courage and decency. If we do not take this into account we may be expressing uncritical approval of conformist attitudes. If, on the other hand, we do take this into account we must conclude that the failure to adapt to a certain social situation may have nothing to do with illness. There have been many examples where persons were labeled as suffering from personality disorders only because they did not adapt to the existing social situation; they had strong and ethically motivated reasons for their nonconformist attitudes. Thus, if we are discussing such problems from a medicosociological point of view, we must answer a crucial question: Is a person's lack of social well-being caused by illness in the medical meaning of the word, or is it caused by illness of the social environment, of a given social system, in the sociological meaning of the word? Of course an evaluation of the "illness" of a given social system will again be very controversial and will depend on social, political, philosophical, and cultural principles.

It is stating the obvious to observe that psychosocial elements play an important role in the etiology of some psychic disorders. However, it would be an oversimplification of mental health problems and of social problems to reduce the concept of psychic disorder to the problem of maladaptation. The ability to adapt adequately is only one of many mental health criteria. Very often an attitude that is evaluated by a given environment as social maladjustment is not necessarily an expression of psychic disturbance and loss of health. In this connection Sir Aubrey Lewis (9) wrote: "There are many forms of social deviations which are not illness, many forms of illness, which are not social deviation." The same author pointed out that "the criterion of health is adequate performance of functions, physiological and psychological. . . . Though our estimate of the efficiency with which functions work must take account of the social environment which supplies stimuli and satisfies needs, the criteria of health are not primarily social: it is misconceived to equate ill-health with social deviation or maladjustment."

If we completely divest the concept of mental health of ethical and political content, and express an opinion against the view of health as a social concept, we cannot agree that sociocultural disintegration is largely responsible for the high prevalence of psychic disorders among the lower socioeconomic classes in the Western countries. However, everyone agrees that there are causal links between social phenomena and psychiatric phenomena, even if one is very critical of the more prophetic than realistic WHO definition of health as a state of social well-being.

Thus we can say that some persons have problems of maladaptation because they are not healthy; social factors can be one of the reasons for their illness. Such persons need the kind of treatment that is often dependent on the solution of some very general social problems and thus may be beyond the limits of available psychiatric treatment. Other persons may have problems of maladaptation because the social structure is "ill"; they may consciously try to change, to "heal," this structure.

A detailed analysis of the impact of different social systems on the WHO's social criterion of health is beyond the scope of this article. But I do not want to restrict myself to making only general remarks—as, for instance, that totalitarian systems act in a deleterious way and liberal systems in a favorable way in regard to this criterion of well-being. Nor, as a psychiatrist, do I want to restrict myself to such general remarks as, for instance, that the possibility of free opposition, of expressing a nonconformist attitude, of being able to say no and to act in a nonconforming way, has the same value as the possibility of "abreaction." Of course individual abreaction without fear of repression, which is so common in totalitarian systems, would not change the history of mankind, but certainly it would make somewhat more bearable the lack of social well-being in a specific case.

REASONS FOR THE DISCREPANCIES

What are the principal reasons for the discrepancies in the Communist countries in which the purely medical criterion of health has been pursued from the outset with the greatest diligence and where public medical care is the basic health service principle? I will cite a number.

1. In my opinion one of the most important reasons is related to certain theoretical formulations of Marx and Lenin. I agree with Fromm's statement (19) that Marx "is supposed not to have been much concerned with individual man, his drives and his character, but only with the laws of society and its evolution." The classical statement of Marx that "it is not the consciousness of men that determines their existence, but on the contrary, it is their social existence that determines consciousness" is an excellent example of an oversimplified approach to the problems of human psychology. Without doubt, social

environmental factors are very important in the formation of personality and consciousness in a broad sense; some elements of this kind of approach also exist in modern currents of psychodynamic psychiatry. However, one should not neglect the important biological and genetic factors and the psychological factors acting on the human being since early childhood that have little or nothing to do with his social situation. Various drives are tremendously important in the formation of the human consciousness. On this oversimplified formulation have been based many popular misinterpretations by the epigones of Marx, such as that before the Communist era man was by nature driven primarily by the wish for economic gain. On the other hand Marx did not elaborate into a system some of his more sophisticated remarks (scattered in his different works) on alienation, on human nature, on the necessity to express human feelings toward the world and toward human beings, and they were not continued by his followers, who concentrated mainly on economic and political factors.

2. Another reason for the discrepancies is belief in the utopian idea that after the victory of the working class in the historical class struggle a perfect human being will emerge in the new society, which will have abolished the class structure. The impossibility of creating a new human consciousness under new economic conditions is one of the most tragic deceptions concerning Marx's concept of the relationship between social existence and human consciousness. To preserve the fruits of victory many sacrifices are demanded from the new society; they are sometimes inextricably bound with inhuman acts and a considerable restriction of human freedom. This again, as might be expected, has just the opposite result—the production of "superconformists," uncritical persons, or extremely nonconforming, hypercritical persons who either act in an open way and are subjected to repression or who dissimulate, which provokes a feeling of shame and unhappiness. Let us not forget that both extremes act in a state of complete lack of homeostasis and are subject to dramatic swings from one attitude to the other.

3. The introduction of a new social and economic system is fraught with many difficulties, including the abolition of the old and the introduction of the new. Even with the most sophisticated administrative measures this transition is not easy; often elements of the old have to be reconstructed (consider, for instance, the New Economic Policy of Lenin). However, it is much easier to change economic and social factors by revolution than to change the human personality, especially if the economic and social changes are executed at a high moral cost. The plasticity of the human psyche is qualitatively different from the plasticity of the social structure. Although it may be difficult to introduce new economic and social principles by revolution, it is much more difficult—if not impossible—to change the human personality and interpersonal relationships by revolution. The famous plasticity of the central nervous system described by Pavlov has limits dictated by general physiological laws and, in human beings, also by moral laws. This is another reason for the discrepancies between the social and medical concept of health in the Communist countries; a forced neglect of such laws produces a definite lack of social well-being.

4. Another reason for the discrepancies is the application of the principle of the class struggle to a new society. According to Marx the history of society is inexorably the history of the class struggle. I am not discussing here the principle of the class struggle as a stage in the history of the evolution of societies. This is a socioeconomic question, not a medical one. But even if we acknowledge the need for the class struggle we must remember that this is a struggle of classes of human beings, who should not lose their human characteristics. When the class struggle means the possibility of physical or psychic destruction of human beings, when intellectual arguments are changed into acts of violence, then not only social but also physical and mental well-being are in danger of dissolution.

5. Another closely related reason for the discrepancies is the creation of an atmosphere of lack of confidence. The slogan "Be watchful" has survived Stalin's period, when many decent people—labeled as enemies—were persecuted and killed. It is not easy to have a feeling of social well-being when one lives in a state of permanent watchfulness.

6. In my opinion one of the most serious reasons is the lack of adequate educational principles for the new generation. Ethologists have demonstrated the "plasticity of instincts." Instinctive behavior (defined by Lorenz [20] as an "innate behavior mechanism") may become maladaptive. If consciousness—as was claimed by Marx—is from the very beginning a social product, it is very easy to distort instincts instead of improving them. Without the knowledge of ethological principles it is easy to create maladaptive behavior. It is also easy, under special conditions, to override "species-protective mechanisms" and manipulate imprinting in order to convert the image of the human enemy (true or imagined) into that of another species. These remarks have been recently brought to the fore by some American psychiatrists. In relation to the work of Lorenz (20), they are investigating what can go wrong in the environmental interaction of infants and are trying to influence a variety of possibilities for adaptation. Man can deliberately alter the image of his enemy and believe that he is killing not a fellowman but a blood-sucking animal, a pig, a dog. The history of all wars is the history of this dehumanization of the human species. The principle of the class struggle contains the same danger of dehumanization of the class enemy.

7. One of the most important practical reasons is the lack (or the inadequacy) of communications within the Communist system. This fact has been recognized by the Communist regimes themselves as one of the greatest errors of unsuccessful party leaders. Unfortunately the error was labeled as such only after their death or political bankruptcy.

According to Ruesch (21), communication can be defined as the process that links discontinuous parts of the living world to one another. Communication is necessary at all levels of organization, from the single cell to com-

plex societies, and its disturbances are reflected on all levels. Through a good system of communication the human being tries to ensure a certain safety in his life—tries to realize the possibility of assuming what will or will not occur. The lack or inadequacy of communication between party leaders and the population in the Communist countries is caused by several factors. One of these concerns the principle of the dictatorship of the proletariat, which in practice is not dictatorship of the proletariat (i.e., of great population masses) but of the party's leaders. The other factor impairing the dialogue between the nation and the party's leaders is the lack of confidence and of sincerity. People are afraid to ask questions, which is incompatible with the dogma of Marxism, and leaders are afraid to tell the truth because the economic situation (aside from some indisputable successes) is not as good as it should be according to Marxist principles. If there is no sincere dialogue between the party and the population, if there is a lack of confidence and sincerity, then party decisions are based on false information, and credibility among the masses is lost. The feedback mechanisms indispensible to all communications systems are out of function. Decisions made without discussion with the population, and without prior notice, are accepted in silence to a certain point but with hidden tension. Beyond this point they are not accepted and are even, in desperation, rejected. This was the reason for the workers' riots in Poland in 1956 and 1970.

8. Another reason for the discrepancies concerns the instability of the system of values. This again is not peculiar to the Communist system; similar problems exist in other systems. Cantril (22), speaking of the human search for security in a physical and psychological sense, said that man, being a creature of hope, is not inclined to resign easily and that he wants to share a system of values and beliefs to which he can commit himself. The enthusiasm of the first commitment to the new system of values in a social system promising the realization of the noble ideals of freedom, equality, and brotherhood to all people, regardless of race and color, fades when the most worshiped values are denigrated. One of the most tragic and shameful examples of this was the wave of anti-Semitism inspired by one of the unsuccessful Polish leaders in 1967. In a country where six million people had been killed by the Nazis (among them three million murdered because of the racist ideology), the antiracist system of values, theoretically one of the principles of Marxism, was devalued in an official speech. The political leader of a Communist country had found a scapegoat on which he projected unacceptable and hostile impulses. Such a projective mechanism is common among totalitarian systems with their fanatical outlooks upon life.

NEED FOR INTERDISCIPLINARY EFFORTS

I have discussed in detail some reasons for the discrepancies between the realization of the medical and the social criteria of health in the Communist countries. This does not mean, of course, that there are no such discrepancies in other social systems. However, in democratic countries there is always the possibility of expressing criticism and no obligation to engage in dogmatic declarations. This is an important positive factor, not limited to the medical definition of health but bound up with general human rights. No normal person can fully enjoy medical health unless he has at least some freedom to express his own beliefs.

How then should we link all the aspects of the definition of health as expressed in the WHO charter? What must we do in order to be able to offer mankind "a state of complete physical, mental, and social well-being, and not merely the absence of disease and infirmity"? If we could accomplish this we would return to the Golden Age, relearn how to be true human beings, and end the destruction of our own species.

I refer again to Julian Huxley's statement (1) that the world "must become a unit de jure by submitting itself to a unitary system of self-government." But to achieve this—not in remote centuries but in a time measured by several human generations—we must concentrate all our efforts on a better exploration and knowledge of human nature. We must learn the mechanisms of species protection, how to use the "plasticity of instincts" for the benefit of mankind. This is our duty as scientists, and I believe that it is not utopian to expect scientists from many disciplines to collaborate in a future unitary system of self-government.

Interdisciplinary efforts by biologists, physicians, psychologists, sociologists, and pedagogues are needed to prepare a scientific program in order to diminish the discrepancy between the conceptual power of human thought and the weakness of social instincts. This is an agenda for many generations of scientists. Most if not all systems of education should be changed; we are already faced with such demands from the younger generation. It is not only a question of the program of studies but of their ethical framework. There should be much more study of mechanisms through which there can be proper channeling of aggressive and other destructive instincts, as well as study of negative reinforcement of such instincts starting in early childhood, the reduction of aggressiveness by genetic selection based on chromosomal investigations, the sublimation of instincts, the means of discharging some of them onto substitute objects, and the responsible channeling of the militant enthusiasm of youth. Principles of human relations between individuals and nations must be subject to imprinting from childhood. The new generations should never forget that the brutality of Nazism was directed toward creating a community of hate, of the annihilation of human values, and of anomie, which is a discord in the rhythm of social life (23). It was Hitler's belief that people do not grow through work and industry but only through hatred. Although the philosophy of other dictators may sound humanitarian, it is in reality quite antihumanitarian and cruel.

A united world is the only hope of contemporary mankind. If such a world is not realized, then we may be faced with another solution. A day will come when a man with

a club in hand will emerge from the cave to begin once more the history of a perhaps more happy humanity. This would mean that we are not the right edition of the species "homo" that is labeled "sapiens."

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NEW SUBSCRIPTION RATES FOR THE JOURNAL

To keep pace with rising production costs, the Association has found it necessary to increase the price of subscriptions to *The American Journal of Psychiatry*. Starting with the January issue, the price was raised to: U.S., $15; Canada and South America, $15.75; other foreign, $18. A single copy now costs $1.75 plus postage.

Chronic Marijuana Use and Psychosocial Adaptation

BY JOEL SIMON HOCHMAN, M.D., AND NORMAN Q. BRILL, M.D.

The authors studied the life history and adaptation of marijuana users and nonusers in a randomly selected representative sample of ten percent of the UCLA undergraduate student body. Statistically significant differences were discovered in family and personal history; educational and work performance; legal history; marital and sexual adjustment; current adaptation; political, religious, and other values; and the use of other drugs. Chronic use of marijuana was not accompanied by significant deterioration in functioning or adaptation but was accompanied by increasing acculturation into a relativistic, gratification-oriented, stimulus-seeking value system.

MARIJUANA HAS BEEN TREATED as an illicit, dangerous substance since 1937. There have been numerous reports of pathological reactions to the use of the drug, though all have been anecdotal (1–5), drawn from foreign populations that are not comparable to American users (6–8), or highly selected (9). Reports of the increasing use of marijuana have been numerous (10) and it is now estimated that the rate of increase of use is 20 to 30 percent per year (11). No report to date has examined the effect of long-term, chronic use of marijuana in a user population that is representative of those principally involved in the burgeoning marijuana phenomenon.

In the fall of 1970 a longitudinal marijuana study project was initiated by a direct mailing to a representative sample of ten percent of the UCLA undergraduate student body, randomly selected by computer. The questionnaire, anonymous unless voluntarily self-identified, included 662 items and examined 14 specific areas of psychosocial adaptation, including personal history and demographic information, parents, siblings, educational history and adjustment, legal history, military experience, marital history and adjustment, sexual history and adjustment, work history, current living situation, politics, drug history, patterns of drug use, and effects of marijuana. In addition, approximately 100 subjects (every fourth self-identified student) were given a psychiatric interview.

The study focused on frequently voiced questions about alleged personality change (9, 12), lack of motivation (13), psychological morbidity (9), and social dysfunction.

METHOD

The questionnaire was mailed directly to the computer-selected respondents, along with a return envelope and self-addressed postcard. Only the postcard bore the respondent's name.

When the questionnaire was completed, the respondent mailed back both that and the postcard simultaneously but separately, enabling us to identify nonrespondents while keeping the questionnaires anonymous. We received a total of 1,400 questionnaires (64 percent of the total sample); 480 students voluntarily identified themselves for further study.

Every fourth volunteer was selected for further study, including a psychiatric interview. In addition half of the nonrespondents were contacted and their histories of drug use were obtained. All nonrespondents were matched with respondents according to characteristics determinable from school records (age, sex, race, major, college class). Both this information and the drug-use histories obtained from 400 of the nonrespondents matched the profile obtained from our respondents. Thus, whatever moved students to not cooperate was apparently unrelated to drug use, grade-point average, major, race, sex, or age.

We also checked the self-reported data against school records (such as grade-point average, number of changes of major, suspensions, etc.) and found the responses we received to be reliable. In combination, all these factors suggest a sound sample in which considerable confidence can be placed.

Read at the 124th annual meeting of the American Psychiatric Association, Washington, D.C., May 3–7, 1971.

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The authors wish to thank Mr. Richard L. Christie, Research Coordinator for the Longitudinal Drug Study, who assisted in preparing this report, and Ms. Betsy Carnahan for her computer assistance.

Computer assistance was obtained from the Health Sciences Computing Facility of UCLA, sponsored by Special Research Resources grant RR-3 from the National Institutes of Health.

This study was supported by a grant from the Department of Mental Hygiene, State of California.

RESULTS

We will present summaries of only those findings which were statistically significant at the level of at least $p<.001$.

Incidence of Marijuana Use at UCLA

For our analysis, three categories of marijuana use were established: 1) no use of marijuana, experimentation only (defined as no use), or use less than ten times in the past year; 2) occasional marijuana use, defined as use from a mimimum of ten times in the past year to a maximum of twice a week for up to three years; and 3) chronic marijuana use, defined as use up to the present of three or more times a week for three or more years, or for two years if use approached daily frequency. Obviously these were very conservative classifications.

According to the above criteria, 65.5 percent were nonusers (47.8 percent had never used marijuana, 4.6 percent had only tried it, and 13.1 percent had used it in the past but had quit), 26 percent were occasional users, and 8.5 percent were chronic users.

Of the 52.2 percent of students who had tried marijuana at least once or were still using it, 40 percent had used it more than 50 times. Concerning current frequency of use, three percent used it daily, 14 percent used it several or more times a week, 29 percent used it several or more times a month, 32 percent used it less frequently, and 21 percent no longer used it.

The chronic users began smoking marijuana at a mean age of 16.5 years, while the corresponding figure for all marijuana users was 18. This suggests that there are personality and social factors which differentially motivate early initiation and continued use (14–16).

Seventy percent of the occasional users and 78 percent of the chronic users had been introduced to the drug by a close friend. Fourteen percent of the first group and 11 percent of the second had been introduced to it by acquaintances, and five percent of each by a sibling. Forty-one percent of the chronic users and 33 percent of the occasional users had been introduced to the drug in high school, as opposed to 13 percent of the experimenters. This supports the hypothesis that starting at an early age accompanies a pattern of heavier use.

The Use of Drugs Other Than Marijuana

We found that drug use among college students is extensive, that the use of all other drugs is associated with marijuana use, particularly if it is chronic, and that the use of all drugs other than marijuana is transitory in college students (see table 1).

There was no statistically significant relationship between marijuana use and the regular use of any other drug. It was concluded that marijuana use does not cause the use of other drugs but does accompany it. It appears that personalities that allow such experimentation fall along a gradient of increasing willingness for such experience—as individuals are more willing to more frequently experience marijuana intoxication, they are also more willing to try other drugs.

TABLE 1

Percentages of Marijuana Users and Nonusers Who Have Used Other Drugs

Drug	Nonusers	Occasional Users	Chronic Users
Hallucinogens			
Mescaline	1	31	64*
LSD	1	29	57*
Hashish	8	79*	100**
Psilocybin	0	8	21
DMT or DET	0	5	11
STP or DOM	0	4	7
Addictive narcotics			
Heroin	0	3	5
Cocaine	0	8	17
Codeine	6	12	26
Opium	0	15	44*
Other drugs			
Barbiturates	4	25	48
Amphetamines	5	42*	76*
Amyl nitrite	0	9	17
Glue	0	3	6
Tranquilizers	12	25	25
Alcohol***	5	10	13

*Current use less frequent than several times a month.
**Current use several times a month or more.
***Consumption of more than five drinks in a three-hour period, once a month or more, excluding holidays.

In our sample, 78 percent of the nonusers said they intended to try marijuana in the future and only one percent of the nonusers said they believed marijuana use produced serious side effects. Since it is difficult to attend the university without knowing marijuana users, it may be that this lack of bad opinion of the drug reflects direct experience and observation.

Marijuana and Academic Performance

We found no statistically significant differences in the academic performance, in either high school or college, of users and nonusers of marijuana, even among the daily smokers.

Among the UCLA college students surveyed, frequency or duration of marijuana use, up to daily frequency, did not appear to affect the ability or desire to obtain high grades.

We found no differences between marijuana users and nonusers in the numbers of probations, suspensions, disciplinary actions, or expulsions. We did find that a higher percentage of chronic users than nonusers intended to go on to graduate school in a doctoral program (18 percent versus 11 percent). Several surveys have indicated that the incidence of marijuana use is much higher in graduate and professional schools, and one study reported that 85 percent of UCLA medical students have tried marijuana (13, 17).

There were no differences between marijuana users and nonusers with regard to: 1) number of changes in major, 2) number of changes in colleges, or 3) number of colleges attended. There was a significant difference between

TABLE 2
Incidence of Marijuana Use by Field of Study, in Percentages

Major	Nonusers	Occasional Users	Chronic Users
Art	44	47	8
Business administration	65	25	10
Engineering	82	14	4
English	58	36	6
Humanities	63	29	9
Languages	72	20	8
Law	78	22	0
Music	50	38	12
Physical education	80	10	12
Physical sciences or math	76	16	8
Political science	57	28	15
Premed or predental	74	21	4
Prenursing	91	9	0
Psychology	56	34	10
Social science	68	24	8
Theater arts	54	33	13
Undecided	67	22	10

chronic marijuana users and nonusers in regard to the number of interruptions in college study. Chronic users more frequently dropped out of school one or more times, but after their return they performed as well as their peers.

Our sample did not include anyone who dropped out and stayed out, and we are vigorously following all respondents in our original sample as they leave UCLA, for whatever reason, in order to resolve this shortcoming.

Forty percent of all students stated that they had a "significant amount" or "great deal" of difficulty in deciding their career goals.

Marijuana use varied considerably as a function of college major (see table 2). The largest incidence of marijuana use occurred among art majors (56 percent) and the smallest among prenursing students (nine percent).

Age, Sex, and Race

The incidence of frequent use of marijuana fell off strikingly in individuals older than 22, with peak usage in the group aged 19–20, reflecting the fact that widespread marijuana use is a relatively recent phenomenon. Studies of incidence in urban high schools indicate that marijuana use is continuing to increase; it is predicted that three years hence the incidence among 22-year-olds will be higher (11).

Women used marijuana less often than men; they constituted 35 percent of the chronic use group and 46 percent of the occasional use group.

Thirty-eight percent of all whites used marijuana. Spanish-American students used it with a comparable frequency, while 21 percent of blacks and 10 percent of Oriental students used marijuana.

Growing Up: Place and Religion

Twice as many individuals who grew up in suburban areas were chronic users as individuals who grew up in urban or rural areas (ten versus five percent). The location in which the individual had lived since age 18 was not significant, nor was the length of residence in the Los Angeles area.

Religion seemed to be related to marijuana use in several ways. Jews were overrepresented in the group of chronic users. Marijuana smokers more often did not follow the religion in which they were raised and more often became involved in nontraditional religions.

Of the Protestants and Catholics who smoked marijuana chronically, only one-sixteenth and one-third, respectively, continued their religious identification. Jews who smoked marijuana chronically did not give up their identification, probably reflecting the fact that being Jewish is more an ethnic than a religious identification today.

The frequency of religious practice was much lower among marijuana smokers: 20 percent of the nonsmokers attended a religious service once or more a week while only six percent of the marijuana smokers did.

Family Factors

Concerning the fathers of marijuana smokers, factors that had *no* significance were: father's citizenship, whether the father was alive, father's education and occupation, father's having the same religion as the respondent, father's use of tobacco, and father's use of all drugs except alcohol and illicit drugs. The father's use of alcohol and/or marijuana were both significantly correlated with the respondent's use of marijuana. The father's being an alcoholic was not significantly related to his child's drug use.

On the mother's side, factors that were significantly ($p<.001$) correlated with respondent's marijuana use were the mother's use of alcohol, tobacco, sleeping medications, pep pills, marijuana, or hashish. Similar findings have been reported in a survey done in Lincoln County, New York. The use of alcohol and tobacco by the mother cannot be simply interpreted as a causative factor, however, since 50 percent of the marijuana smokers had no such parental history.

Parents' divorce, the socioeconomic status of the family, and having stepparents were unrelated to marijuana use.

The size of the respondent's family was not significant, nor was reported sibling rivalry or discord. The smoking of tobacco by the oldest child was significantly related to marijuana use, as was the use of marijuana, hashish, barbiturates, amphetamines, and hallucinogens by older siblings. This and interview studies indicated that, if one child in a family uses marijuana, the other children are more likely to do so than are siblings of nonusers.

Although there was no relationship between reported family discord and marijuana use, and 50 percent of all students left home to go to school, 28 percent of the marijuana smokers listed wanting to get away from their parents and live on their own as the prime motivation for moving out, whereas only ten percent of the nonsmokers did so.

Marriage and Sexual Behavior

Both users and nonusers of marijuana were comparable in the incidence of marriage, divorce, and all data associated with marriage, including age at marriage; number of marriages, divorces, and separations; number of children; reported mutual marital and sexual adjustment; and number of extramarital sexual partners. Of those who were married, 90 percent of the chronic users and 96 percent of the nonusers and occasional users had had no extramarital sexual encounters.

Marijuana users began sexual experience at an earlier age, saw themselves as more experienced, had more sexual experience, suffered more venereal disease, and had a more liberal attitude toward sex than nonusers (see table 3). Marijuana users and nonusers did not differ significantly in regard to homosexuality, frequency of intercourse, or number of concurrent sexual partners.

No differences were found between the groups regarding the number of pregnancies, miscarriages, and illegitimate births. Roughly six percent of all women students had been pregnant at least once; two percent had been pregnant as many as three times. An interesting finding (significant at $p<.01$) was that, of those women reporting loss of time from work or school due to menstrual difficulties, 87 percent were nonusers of marijuana. Eleven percent of all women nonusers, compared with four percent of women marijuana users, had "symptoms" with their menses. It is of interest that tincture of cannabis was a classic remedy for menstrual cramps before the turn of the century.

TABLE 3

Sexual Experience and Behavior, in Percentages

Item	Nonusers	Occasional Users	Chronic Users
Am a virgin	52	20	6
Am sexually expert	30	58	65
Lost virginity before age 18	30	50	74
Still virgin at age 19	48	28	26
Had homosexual experience	3	8	6
Think that homosexuality is sick and unnatural	26	8	4
Currently have only one sex partner	93	87	84
Total number of sex partners			
One	46	22	16
Five to nine	12	24	24
Ten to 19	7	14	15
Have had gonorrhea	2	5	9

Legal History

We found no differences between users and nonusers in the number of arrests for misdemeanors or felonies or in the number of convictions; 98 percent of the nonusers and 93 percent of the users had no such convictions.

There were significant differences between marijuana users and nonusers in two items of legal history: the number of moving traffic violations and a history of parole or probation. Seventy-three percent of those with no traffic violations were nonusers, compared with 21 percent of the occasional users and six percent of the chronic users. This finding may be related to the anti-authoritarian and thrill-seeking personality of the marijuana user that has been hypothesized. Although 65 percent of the chronic users reported occasionally or frequently driving while intoxicated, only eight percent reported receiving a traffic citation while "stoned."

Five percent of the marijuana users versus one percent of the nonusers had histories of parole or probation. Almost all of the marijuana users' probations were for possession of marijuana or another mind-altering drug. However, from our data it would appear that a marijuana user in the college population stands a one in 20 chance of being arrested for marijuana use over the course of three years or more.

Military Experience

Marijuana use was statistically unrelated to any variable connected with actual military experience among veterans. Only three percent of the occasional users were initiated into the use of marijuana while in the service. Apparently marijuana smokers who have sufficient intelligence and ambition to attend UCLA are able to perform as satisfactorily, without detection, as their nonsmoking peers in the armed forces (18).

There were considerable differences between users and nonusers concerning draft status and attitude toward possible induction (see table 4). Of those not having student deferments (2-S), 75 percent of those classified as conscientious objectors were marijuana users. All other classifications were equally distributed.

Work History

No differences were found regarding the age at which the first job was obtained, total number of full-time jobs, etc. Three times as many chronic users as nonusers (15 versus five percent) quit their jobs because they found them dull. Nonusers were twice as likely to stay on a job three years or more.

Current Life-Style

About one-third of the nonsmokers still lived at home with their parents, compared with 20 percent of the occasional users and ten percent of the chronic marijuana users. Six percent of the nonusers and occasional users lived in a fraternity house, compared with one percent of the chronic users. Chronic users rented a house eight times more often than did nonsmokers and eight percent reported living communally with two or more members of both sexes, an arrangement reported by no nonusers of marijuana. Eight percent of the chronic users, five percent of the occasional users, and one percent of the nonusers lived with a member of the opposite sex. Twenty-nine percent of the chronic users, 16 percent of the occasional users, and eight percent of the nonusers had lived in five or more dwellings in the past five years. In fact, 27 percent of the chronic users had lived in six to

TABLE 4
Attitude Toward the Draft, in Percentages

If drafted, I intend to:	Nonusers	Occasional Users	Chronic Users
Cooperate	56	28	10
Try to obtain conscientious objector status, but			
Cooperate if unsuccessful	12	5	15
Go to jail if unsuccessful	2	4	3
Emigrate if unsuccessful*	4	14	24
Evade the draft while staying in the United States*	4	16	24
Other	22	33	24

*Significant at $p<.0001$.

ten dwellings during the past five years. Intercity mobility was similar: twice as many chronic users as nonusers had lived in four or five cities over the past five years.

There were no differences between the groups in total annual income, means of transportation, or total monthly expenses. Nonusers more often depended on their parents for income (47 percent versus 38 percent), spent more for food, and used more of their time for dating, sports, and television; all these differences were statistically significant. Thirty-one percent of the chronic users listed taking drugs with their friends as their principal use of leisure time, compared with three percent of the occasional users.

Significant differences in adaptation were revealed by the respondents' answers to the question, "Where do you go for help with a serious problem?" Twice as many nonusers as users turned to their parents first. Users were twice as likely to turn to a friend, male or female. The age of this friend was highly different for the nonusers, 20 percent of whom would first turn to an older friend, as compared with only two and four percent of the occasional and chronic users. Virtually no one listed a clergyman, teacher, sibling, or other relative as the first source of assistance. Surprisingly, nearly 17 percent of all the subjects reported that they would turn to no one. In summary, the nonusers appeared to have a more positive attitude toward age and authority, while users invested confidence in their peers. This may reflect the fact that few older persons have had experience with drugs or maintain an attitude compatible with the values of drug users.

Plans for the Future

Eighty percent of all students stated they intended to be in school next year, but 17 percent of the chronic users, compared with five and eight percent of the nonusers and occasional users, gave "unknown" or "undecided" for their plans for the next year. Two percent of the chronic users said they intended to drop out, whereas none from the other groups did. When the projection was extended to five years hence, 35 percent of the chronic users, 30 percent of the occasional users, and 17 percent of the nonusers were undecided. Projected to 15 years, 25 percent of the chronic users and 16 percent of the nonusers were uncertain about their future. Twelve percent of the nonusers projected themselves into high school teaching, compared with six percent of the chronic users; 18 percent of the chronic marijuana users planned to pursue college teaching, compared with eight percent of the nonusers.

It appears that chronic marijuana use is accompanied by less certainty regarding long-range plans and a self-acknowledgment of the possibility of change or evolution in interests. This is consonant with our impression that among chronic users there is a strong thrust toward involvement with the immediate rather than a delay of interest or activity for the future; nevertheless, their long-term aspirations are more ambitious.

Politics

Marijuana users are more liberal, more politically interested and/or active, more likely to have liberal parents, and more interested in altering the form of government and laws than are nonusers.

The percentage of all students who professed an interest in politics increased from 47 to 79 percent over the past two years. Twenty percent of the users were politically active two years ago, while only eight percent of the nonusers were. Currently only 12 percent of the users are still active, while eight percent of the nonusers still are. Total percentages of users and nonusers who described themselves as "extremely involved" fell as follows over the two years for which we have data: chronic users—from 12 percent to eight percent, occasional users—from two percent to one percent, and nonusers—from one percent to zero. This suggests that the reduction in activism was more related to what Keniston (19) called "student alienation" than to marijuana.

The percentages reporting they had liberal parents were: chronic users—33 percent, occasional users—26 percent, and nonusers—17 percent.

There were 573 students eligible to vote. Of these, 20 percent of the marijuana users and 14 percent of nonusers had voted in the last presidential election. The nonusers preferred Nixon to an extent twice that of the occasional users, and five times that of the chronic marijuana users (36 versus 16 versus seven percent). Thirty-five percent of the occasional users and 56 percent of the chronic users preferred "Peace and Freedom" or other third-party candidates.

Concerning changes students would like to see in society, in every instance of a "liberal" change, marijuana use was significantly and positively correlated with the strength with which the respondent favored the proposal. In fact, a graph expressing the relationship between marijuana use and liberality in politics is linear. This may be the result of the acculturation that accompanies continued use of marijuana and membership in the "drug culture," which is strongly liberal politically and antagonistic toward the present policy makers.

Driving

Alcohol: Four percent of the nonusers of marijuana

admitted to driving occasionally while drunk, as opposed to 15 and 19 percent of the occasional users and chronic users.

Marijuana: Twenty-seven percent of the occasional users never drove when intoxicated by marijuana. One-third of all users occasionally drove while "high," 32 percent of the chronic users frequently drove while "stoned," and ten percent said they always drove when "stoned."

Both marijuana users and nonusers were universally of the opinion that marijuana "intoxication" affected driving, but the users thought that they compensated by being more cautious, driving more slowly, and concentrating on their driving. Interestingly, the marijuana users enjoyed a good reputation for driving among nonusers. Only two percent of the nonusers thought marijuana users drove more recklessly while high. The users did report getting lost more frequently while high, which is probably due to interruptions in short-term memory. Eight percent of the occasional and chronic users had received a traffic ticket while "stoned." The fact that none of them had been discovered to be intoxicated, even while receiving the ticket, reflects the subtlety of the drug's effects.

Effects Experienced and Motivations for Use

Clearly, the most frequently experienced effects are euphoria, mellowness, decreased tension, and a feeling that time is passing slowly. The impression that tastes and sounds are intensified is reported only somewhat less frequently, and users report increased sexual pleasure and appetite, sleepiness, thirst, and a sense of increased creativity, awareness, and communication with others.

From our clinical work and interviews with chronic marijuana users we had derived the impression that a large portion of the effects of marijuana intoxication were so subtle that the subject required a period of initiation in order to learn to attend to the sensations that he otherwise would not perceive. Our data show that all the effects listed above are more often reported as the individual continues into chronic use. Beyond an explanation based upon the need to "learn" the effects, the possibility also exists that a neurobiochemical enzymatic activation may be necessary for the conversion of tetrahydrocannabinol to active cannabinols or their metabolites (20).

Regarding "hangover" effects, less than one-third of all users occasionally experienced sleepiness, mellowness, hunger, or tranquility the morning after intoxication.

Almost all users stated they principally used the drug while at home with friends as a social entertainment or before venturing out for outdoor or public events. Unlike the users of alcohol, marijuana users consciously and deliberately seek to alter their experience of the entertainment by being under the influence of the drug's effects.

Occasional and experimental users gave these reasons for use, in order of importance: 1) to feel good, 2) as something to do with friends, and 3) to relax. Approximately one-third of the chronic users stated that very important additional motivations were to increase their self-awareness, change their perspective, and increase sexual pleasure. Subjects reported that, with continued use, they learned to use the physiological effects of the drug to their own advantage. We have also amassed considerable evidence that experienced users are often able to "throw off" the effects of the drug when the situation demands it.

As the user becomes more acculturated into marijuana-using social groups, the drug and its immediate and long-term effects seem to become more important as a common social bond; 16 percent of the occasional users listed it as a very important thing to do with friends, while 47 percent of the chronic users did.

Attitudes About Marijuana with Continued Use

With continued use the user becomes more convinced that the drug is desirable and less convinced of its detrimental effects. This is strikingly different from the pattern one finds among alcoholics or opiate addicts. In these cases, the addict usually consciously perceives the addicting drug as increasingly undesirable, though it is increasingly desired unconsciously. This increasing desire expresses itself in increasing frequency of use and dosage. With marijuana use, frequency does not increase to the limits of physical tolerance; the individual seeks out his level of desired frequency of intoxication and stabilizes there.

Student Views on Marijuana Users

Subjectively, marijuana users described themselves as more sensitive, informed, rebellious, intelligent, idealistic, introspective, socially involved, sophisticated, well adjusted, conscientious, reliable, responsible, and cynical than nonusers. Nonusers agreed with them on sensitive, rebellious, idealistic, and introspective. Nonusers felt that users were less well-adjusted, ambitious, and religious, and more troubled. All students felt that users did not differ from nonusers significantly with regard to being well adjusted, antisocial, dirty, promiscuous, cynical, realistic, or studious.

DISCUSSION

The study presented here thus far casts considerable light on several questions. In a population of largely middle- to upper-middle-class American youth with above-average intelligence, achievement motivation, and opportunity in life, the frequency and duration of marijuana use had no correlation with academic achievement, which presumably reflects motivation. This aspect of our study has since been replicated by a study at the State University of New York at Stony Brook (21). These results challenge the validity of a commonly held theory that marijuana use results in an "amotivational syndrome."

There seem to be two major possibilities here: 1) that marijuana use may reduce achievement only marginally, so that middle-class persons who are experiencing persisting anxiety and "overmotivation" become less so through the use of marijuana, and then function effectively within the socially functional range of performance; and 2) that chronic marijuana use may accompany noneffective levels of performance, but in persons

with marginal motivation or psychosocial capabilities. In these persons, "amotivation" should be seen as far more intimately related to alienation (19), future shock (22), or other sources of psychologically and/or socially based dysfunction, rather than to drug use alone. Indeed, their heavy drug use may be most rationally seen as symptomatic of a dystonic emotional state. Experimentation or moderate drug use, in contrast, is best seen as comparable to similar patterns of use of alcohol. Our continued study is designed to investigate these hypotheses. Our findings to date clearly require that these questions be pursued.

The longitudinal study cannot answer questions about the impact of chronic marijuana use on those whose adaptation is too marginal or too low to achieve college-level study. But it clearly defines the impact of such drug use upon the mass of college users and narrows the question of amotivation to special populations.

It seems appropriate here to point out that, in the United States, the marijuana user is generally drawn from the most achievement-oriented classes, while in India and other countries having long traditions of cannabis use, users are generally from the lowest, least productive classes. For many reasons, these individuals are in no way comparable to marijuana users in America, and any generalizations from the experience of other societies to our own is a hazardous venture.

Except for the noted concordance between the use of consciousness-altering substances by parents and by their children, relationships between drug use and family background variables were not significant. We believe this reflects the fact that, increasingly, junior and senior high schools are becoming the main locus of acculturation into a peer culture that carries themes of drug use as well as other aspects of life-style and political philosophy. This explains the linear correlation between "leftness" of politics and marijuana use overall, even with many individual differences. Neither "causes" the other; we believe they are themes carried by the same vehicle—the youth culture.

It is our hypothesis that, as the polarization across age (40 seems the main dividing age) in our society increases, the peer group becomes so strong a socializing agent of values and life-style for youth that the effect of parental upbringing is increasingly being "washed out," at least in respect to drug use, political philosophy, and sexual behavior. The design of our longitudinal study will permit the gathering of extensive data on this question in the future.

In general, we have found no evidence that preexisting psychopathology, as such, is a significant determinant of marijuana use, including chronic use. We have a large sample of chronic users recruited from the general Los Angeles area, which includes many older users (our record holder has been "stoned" almost daily for 44 years), and the same is true of them. However, as noted earlier, marijuana users do appear to be more rebellious, reckless, questioning, anti-authoritarian, etc., than nonusers.

We have found no significant differences between marijuana users and nonusers in any area of psychosocial adaptation bearing on what may be reasonably considered the requirements of "good citizenship," with the exception of their views on the military and the draft, which are again views associated with the larger youth culture. The India Hemp Commission Report of 1894 (23) and each study since have exonerated marijuana of any connection with crime or acts of violence, and many studies have suggested that the relaxing and euphoric qualities of the drug render such acts less probable.

The current pervasiveness of the use of marijuana, along with the favorable attitudes toward it by both users and their nonusing peers and the consistent evidence of increasing incidence of use, down to and including the grade-school level, all predict that marijuana use will probably become a cultural norm within a few years for persons under 30. A good estimate of the ultimate percentage of users of any pattern is around 70 percent. A certain number of people will eschew marijuana for attitudinal, religious, or health reasons. The percentage of experimenters who have quit after finding the drug's effects not to their taste approaches 21 percent at UCLA.

Our study shows that, although other drug use accompanies marijuana use and was greater in both frequency and range in relation to the extent of marijuana use, this use represents experimentation, which becomes infrequent for the majority of drug users. At least for college students, acquiring an addiction to or regular use of a drug other than marijuana is so rare as to be remarkable, i.e., about 0.1 percent of marijuana users.

Finally, there is a point at which marijuana use reaches "abuse," in the sense that the person's ability to function is damaged. Probably about one percent of marijuana users reach this problematic level, representing an analogy to alcoholism. The dividing line appears to involve whether the individual stays intoxicated all the time. Persons who use marijuana daily, but primarily in the evening after the workday and on weekends (cocktail pattern), rarely show any loss of ambition or ability. But even when intoxication is constant, there are large individual differences. We have encountered many persons in creative and artistic occupations who manage to stay constantly "stoned" with impunity and maintain their productivity, and we have encountered more than several cases of computer programmers and other highly skilled persons who manage quite well while persistently intoxicated. One wonders, however, how much more they would accomplish without marijuana, and such people do seem to be an exceptional group, outside the general rule.

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DISCUSSION

TERRY C. RODGERS, M.D. (New York, N.Y.)—Drs. Hochman and Brill have presented us with a well-designed statistical study of the life-style and current psychosocial adaptation of three categories of college students, namely, 1) nonusers of marijuana, 2) occasional marijuana users, and 3) chronic marijuana users. My remarks will be limited to a discussion of the chronic users.

The findings regarding the life-style, attitudes, and values of this group are in large measure consistent with the findings of other investigators (1). These include acculturation into the marijuana subculture with its antitraditionalism, unconventional mores regarding sexual behavior and work, political "liberalism," pacifism, and the active seeking of immediate gratification and altered states of consciousness through the use of psychedelic drugs. Though it is not emphasized by the authors, the data would also support the findings of both earlier (2, 3) and recent (1, 4) investigators as to the anti-aggressive effect of marijuana. However, findings regarding scholastic performance and self-assessment of personality traits are in rather sharp contrast to most of the recently published studies (4, 5).

The finding that even the chronic use of marijuana did not result in diminished scholastic performance or motivation requires special attention and some attempt at explanation, in view of the known toxic effects of heavy doses of cannabis. Though I have no ready explanation for this finding, a number of ideas come to mind.

This was a voluntary sample and therefore self-selective. It is conceivable that the more apathetic of the heavy users did not respond to the initial questionnaire. It is also possible that the socioeconomic and ethnic composition of the chronic users loaded this group with persons of superior intellectual endowment. Individuals from suburban backgrounds and Jews were said to be overrepresented in this group. In addition, grade comparisons were made across all fields of study without regard for the fact that certain disciplines are more intellectually exacting than others.

A more likely explanation is that the marijuana users among present-day college students are the distillate of an experience-screening process in regard to the capacity to use marijuana without serious disorganizing effects. Experimentation with marijuana among high school students has been commonplace for several years now. It is not unlikely that those persistent users who are especially vulnerable to its disorganizing effects never make it to college, or do not long survive if they do.

Another finding that suggests a self-screening process is the high incidence of subjectively pleasant effects of marijuana intoxication, together with a low incidence of subjectively unpleasant effects among the chronic users. The reverse characterizes the nonusers who have experimented with the drug. This is not to imply that we should take the self-reported claims of increased creativity, self-awareness, ability to communicate, and capacity for abstract thinking at face value. My own clinical experience suggests that the oft-claimed increased ability to communicate is invariably an illusory, purely subjective phenomenon and contrasts sharply with the perceptions of a nonintoxicated observer. More weighty evidence for this opinion is contained in Weil and Zinberg's (6) experimental study of the effects of marijuana on speech, which revealed marked impairment of narrative quality, coherence, unity, awareness of a listener, thought completion, and time orientation.

I have also been impressed by the consistent inability of those who claim increased self-awareness from marijuana use to describe these "insights" in language that I can comprehend. Invariably they resort to mystical, cosmic, and transcendental verbiage that makes the sociologist in Willie Morris' *North Toward Home* (7) sound like a paragon of clarity.

The marijuana users' egocentric view of themselves as more sensitive, informed, rebellious, intelligent, idealistic, sophisticated, and well adjusted than nonusers, together with their almost total submersion into the anti-authoritarian marijuana culture, raises some serious questions about the role of marijuana in locking these young adults into a prolonged, if not perpetual, adolescence. Our traditional concept of maturity and mental health is exemplified by Freud's dictum, "Where id was, there shall ego be." The marijuana culture stands this dictum on its head and, through the use of mind-altering drugs, actively seeks a state of "where ego was, there id shall be." It would seem that chronic marijuana users seek to be manipulators of their egos rather than strivers for ego mastery. In this sense, their psychodynamic structure is closer to that of the perversions than to that of the neuroses, and this may account for the absence of identifiable psychiatric symptoms in the present sample.

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Questions of the Month

Each of the incomplete statements below is followed by five suggested completions. Select the one that is BEST in each case.

Question 1

Extensive studies of the extremely intelligent child show that such children are, compared to the average,

(A) less stable emotionally.
(B) more neurotic.
(C) more stable emotionally.
(D) physically weaker.
(E) more often the youngest siblings.

Question 2

The most striking and consistent abnormality in the sleep of depressed patients is

(A) prolongation of Rapid Eye Movement sleep.
(B) absence of Rapid Eye Movement sleep.
(C) high arousal threshold.
(D) diminution of stage 4 sleep.
(E) diminution of stage 2 sleep.

(The Questions of the Month are from the Self-Assessment Program of APA. The answers are supplied on page 164 of this issue.)

Reversal of Antiparkinsonian Drug Toxicity by Physostigmine: A Controlled Study

BY M. KHALED EL-YOUSEF, M.D., DAVID S. JANOWSKY, M.D., JOHN M. DAVIS, M.D., AND H. JOSEPH SEKERKE, PH.D.

Three female schizophrenic patients receiving a combination of psychotropic agents, including the antiparkinsonian agent benztropine mesylate, developed the central anticholinergic syndrome, consisting of hallucinations, anxiety, short-term memory loss, disorientation, and agitation. These symptoms responded dramatically to physostigmine salicylate administered intramuscularly; they were unaffected by placebo injection given on a double-blind basis. In patients receiving multiple psychotropic drugs, evaluation of whether the patient is acting confused because of the combined central anticholinergic properties of these drugs is important. When identified, this syndrome can usually be treated by reduction of the dose of the anticholinergic agents or in special instances by the use of the cholinomimetic agent physostigmine.

A NUMBER OF REPORTS have indicated that toxic confusional states may occur following the administration of such psychotropic drugs as phenothiazines (1–3), tricyclic antidepressants (4), and anticholinergic antiparkinsonian drugs (5–7), given alone or in combination (4, 6). Generally, these confusional states respond to dosage reduction or medicine discontinuation and are associated with signs of peripheral anticholinergic activity. The hypothesis investigated in this paper is that the confusional state seen with these drugs is essentially an atropine psychosis.

A number of reports have indicated that anticholinergic drugs, including atropine (8–10), scopolamine (11), and the various atropine-like antiparkinsonian agents (6), can cause a toxic confusional state (central anticholinergic syndrome) characterized by disorientation, lack of attention, agitation, visual and auditory hallucinations, anxiety, insomnia, illusions, loss of short-term memory, purposeless movements, pantomime activity with nonexistent objects, and agitation characteristic of an organic brain syndrome. This confusional state is also associated with anticholinergic toxic symptoms consisting of mydriasis, cycloplegia, temperature elevation, constipation, motor incoordination, dry mouth, flushing, and tachycardia and is dose related (11).

The physiologic basis of this "central anticholinergic syndrome" (8) is the *competitive* inhibition by atropine-like compounds of the neurotransmitter acetylcholine at the central cholinergic muscarinic receptor sites (12). Physostigmine salicylate, a cholinergic substance that crosses the blood brain barrier, can effectively antagonize both the central and the peripheral anticholinergic effects of atropine, scopolamine, and the synthetic anticholinergic drugs (13–17), competitively inhibiting the acetylcholine-destroying enzyme acetylcholinesterase. This leads to excessive accumulation of acetylcholine at the receptor (12, pp. 442–454). Physostigmine has successfully reversed experimentally induced delirium in normal volunteers intoxicated by atropine and scopolamine. In the clinical situation it has been used to reverse atropine and scopolamine coma (15–17). Physostigmine also reverses the organic brain syndromes associated with anticholinergic poisoning incurred by drug abusers and by individuals making suicide attempts with either over-the-counter sleep preparations containing atropine-like compounds or with tricyclic antidepressants (13, 15, 18, 19).

The reversal by physostigmine of the occasional toxic confusional state observed after administration of antiparkinsonian drugs in combination with phenothiazines and/or tricyclic antidepressants has not been investigated, and its efficacy in reversing the central anticholinergic syndrome has not been clinically studied using double-blind techniques.

The current double-blind study was conducted to determine whether the worsening of psychosis that we observed in a number of patients, which occurred after the administration of a polypharmacy of psychotropic and antiparkinsonian agents, is an atropine-like psychosis superimposed on the underlying schizophrenic illness.

METHOD

Three schizophrenic female patients received pheno-

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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This work was supported in part by Public Health Service grants GM-15431 from the National Institute of General Medical Sciences and MH-11468 from the National Institute of Mental Health, and by research support from the Tennessee State Department of Mental Health.

The authors wish to acknowledge the assistance of Ms. Rochelle Dreyfuss in performing the laboratory experiments.

thiazine medication. Initially their psychotic symptoms were alleviated, but they developed parkinsonian side effects. Benztropine mesylate (Cogentin) was then added to the treatment regimen, and one patient also received a tricyclic antidepressant. The first patient received 150 mg. of thioridazine and 6 mg. of benztropine mesylate per day. The second patient received 150 mg. of imipramine, 72 mg. of perphenazine, and 12 mg. of benztropine mesylate per day. The third patient received 800 mg. of chlorpromazine and 8 mg. of benztropine mesylate per day.

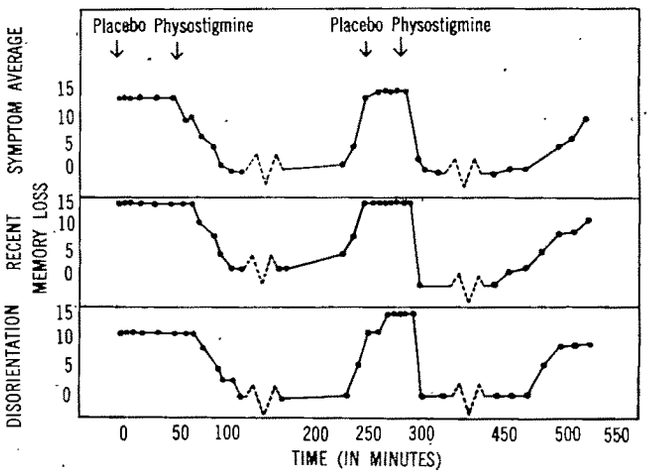
Serial mental status examinations for the testing and rating of five target symptoms on a 15-point rating scale, with 15 being the most extreme, were used to rate: 1) visual and auditory hallucinations, 2) disorientation, 3) short-term memory loss, 4) anxiety, and 5) psychosis. Hallucinations were rated as to their severity and persistence. Disorientation was evaluated for the patient's comprehension of person, place, and time (day, date, and year). Short-term memory loss was rated as the patient's inability to remember three two-digit numbers given 30 seconds previously. Anxiety and psychosis were rated using a modified Bunney-Hamburg scale (20). Physostigmine and placebo injections were given during the confusional states. Each patient was given, intramuscularly, one or more doses of placebo and one or more doses of 4 mg. of physostigmine on a double-blind basis. Each was then evaluated for alleviation of the confusional state by raters who were unaware of whether a placebo or physostigmine was being administered.

RESULTS

Each patient developed a central anticholinergic syndrome characterized by a marked disturbance of short-term memory, impaired attention, disorientation, anxiety, visual and auditory hallucinations, and increased psychotic thinking. In all three patients these symptoms occurred in intermittent episodes, lasting from two to 12 hours. At the time of these psychotic-confusional states, there were peripheral anticholinergic signs in all three patients, consisting of dilation of pupils, constipation, dry mouth, and mild signs of dehydration. The patients were completely unable to remember three numbers after a 30-second delay, and they were unable to count backward from 20 to one. Their attention was markedly impaired and they were grossly disoriented. They episodically manifested vivid visual hallucinations to which they reacted. They had no idea where they were and could not remember the year, month, or day and, often, their names.

However, to the unsuspecting observer, the toxic nature of the symptoms was not obvious, since the patients were originally psychotic and confused because of their schizophrenic illness and the anticholinergic syndrome was superimposed over their "natural" psychosis. However, the clinical picture observed was actually specific when examined closely for target symptoms, since the short-term memory impairment was so striking and the pattern of visual hallucinations generally different from that of the preexisting schizophrenia. The most convincing proof that the patients suffered from the central anticholinergic syndrome was the dramatic reversal of the syndrome by physostigmine therapy.

FIGURE 1
The Effects of Placebo and Physostigmine in Reversing Benztropine Mesylate Toxicity in Patient H.G.



CASE REPORTS

Case 1. H.G., a 26-year-old married female schizophrenic, initially improved on thioridazine therapy and was given benztropine mesylate for marked extrapyramidal side effects, with poor results. The patient, who was interacting well and had no paranoid ideation, was receiving 150 mg. of thioridazine and 6 mg. of benztropine mesylate daily. Then, acutely and intermittently, she became anxious and had auditory hallucinations as well as a return of her paranoid thinking. She was delirious, unable to concentrate, had loss of immediate recall, and was disoriented in regard to person, place, and time.

She was given two placebo and three 4 mg. physostigmine injections, intramuscularly. There was dramatic clinical improvement after all three physostigmine injections, with reversal of all of the aforementioned symptoms and decrease in the rating scale values ten to 15 minutes after the physostigmine injection. This improvement lasted two to three hours. No change was noted with placebo. Figure 1 shows the effects of two placebo and two physostigmine injections in this patient. It is evident that neither the average score nor individual symptoms such as immediate memory and disorientation changed with placebo. Yet all scores were reversed within 15 minutes after the physostigmine injection, from severely impaired to close to normal, for about two hours. It is relevant to point out that physostigmine reverses experimentally induced scopolamine delusions for about this same time period (16).

Case 2. M.P., a 34-year-old chronic, withdrawn schizo-affective schizophrenic woman, was placed on 150 mg. of imipramine (Tofranil) and 72 mg. of perphenazine (Trilafon). She developed moderate extrapyramidal symptoms for which benztropine mesylate was given and gradually increased. When the dosage reached 12 mg. per day the patient exhibited anx-

iety, confusion, poor concentration, and disorientation in all three spheres and reported visual hallucinations of blood spots on her body, which she tried to wipe off. These symptoms were intermittent, lasting for one to three hours. Two placebo and three 4 mg. physostigmine injections were administered intramuscularly. The patient's toxic symptoms were alleviated within 15 to 30 minutes of the physostigmine injections; this improvement lasted one and one-half to two hours. There was essentially no change with placebo.

Case 3. C.W., a 14-year-old girl, was admitted in a withdrawn state; she had active auditory hallucinations and paranoid ideation. She was started on chlorpromazine, which was gradually increased to 800 mg. daily, and was given 8 mg. of benztropine mesylate daily for her extrapyramidal symptoms. In acute and intermittent episodes the patient exhibited a recurrence of her previously controlled auditory hallucinations and paranoid ideation and also exhibited concomitant delirious symptomatology with confusion, poor concentration, loss of recent memory, and disorientation in all three spheres.

She was given one placebo and two 4 mg. physostigmine injections, intramuscularly. No change was noted with placebo, but a marked alleviation of the aforementioned toxic delirium symptoms occurred ten to 30 minutes following the physostigmine injections. This improvement lasted more than two hours.

Table 1 presents the results of the central anticholinergic syndrome rating scale for the five variables studied, consisting of memory loss, disorientation, hallucinations, anxiety, and psychosis, and a full-scale score composed of the average of the individual items. The results represent an average ± standard error of the mean of the five placebo and eight physostigmine injections received by the patients. The table summarizes the ratings prior to placebo injection, 30 to 90 minutes after placebo injection, prior to physostigmine injection, 30 to 90 minutes after physostigmine injection, and 90 minutes to four hours after physostigmine injection. Placebo injection caused a very slight but statistically insignificant decrease in all five variables studied. In contrast, the physostigmine produced a dramatic decrease in the scores. These changes were clearly statistically significant and clinically dramatic. We also noted an increase in parkinsonian symptoms five to ten minutes after the physostigmine injection; these symptoms lasted ten to 20 minutes. With patient M.P., no change in the benztropine mesylate dosage was attempted and toxic symptoms stopped recurring after five days. In the other two patients, toxic symptoms disappeared within two days after discontinuing benztropine mesylate.

Multiple observations on a small number of subjects present a statistical problem without an elegant solution. Alternate analyses of these data utilizing either t tests between change scores (placebo-placebo base line versus physostigmine-physostigmine base line) or t tests between the mean for each subject in base line-placebo, or base line-physostigmine periods yield, as expected, essentially the same findings as the previously cited analyses. That is, there was no change with placebo and a statistically significant improvement with physostigmine on the individual dimension of immediate memory, disorientation, hallucinations, and psychosis, as well as on the average scores.

DISCUSSION

The previously cited information demonstrates that in our three cases, the toxic confusional state associated with the simultaneous administration of clinical doses of antiparkinsonian agents, phenothiazines, and tricyclic antidepressants for therapeutic reasons was alleviated by physostigmine injection, but not by placebo, administered on a double-blind basis. Thus the confusion was almost certainly due to anticholinergic toxicity. As contrasted to the confusional states occurring when parkinsonian patients are given anticholinergic agents for treatment of their primary disease, when preoperative patients receive too much scopolamine, or when patients intentionally take an overdose of anticholinergic agents, the central anticholinergic syndrome presents a difficult diagnostic problem in psychiatric patients. This is due to the fact that these patients may often already be psychotic, confused, and agitated, and the onset of the toxic confusional state may cause subtle, rather than dramatic, changes in mental status, which are in the direction of the primary psychosis. Indeed, Gershon felt that the anticholinergic drug N-ethyl-3-piperidyl cyclo-

TABLE 1

Improvement in Mental Status in Three Patients Receiving Benztropine Mesylate Following Administration of 4 Mg. of Physostigmine Intramuscularly

Treatment Phase	Memory Loss	Disorientation	Hallucinations	Anxiety	Psychosis	Average
Placebo base line	13.6 ±0.8	10.6 ±1.4	10.2 ±2.0	10.6 ±1.3	12.6 ±1.5	11.6 ±1.1
Thirty to 90 minutes after placebo	13.0 ±0.9	11.7 ±1.2	8.2 ±2.1	9.1 ±1.7	12.4 ±1.1	10.9 ±1.2
Physostigmine base line	12.5 ±0.97	10.38±1.07	7.63±1.82	8.86±1.18	11.5 ±0.89	10.2 ±0.88
Thirty to 90 minutes after physostigmine	3.79±1.30*	1.79±0.87*	0.53±0.50**	3.99±1.22***	2.95±1.24*	2.81±0.84*
Post-phase physostigmine	8.0 ±1.52***	5.36±1.48***	1.54±1.49	5.12±1.59	5.7 ±1.40	5.22±1.40

*p<.001 compared with the item immediately above.
**p<.01 compared with the item immediately above.
***p<.05 compared with the item immediately above.

pentylphenylglycolate hydrochloride (Ditran) closely simulated or activated schizophrenic symptomatology in some patients (10).

It is our impression that the intensification of psychiatric symptoms in a psychotic patient treated with antipsychotic agents and antiparkinsonian drugs is a rather common phenomenon. Often such symptomatic deterioration is attributed to the patient being "allowed to regress" in the inpatient setting or to the patient's becoming worse due to the "natural course of his disease." The diagnosis of an agitated schizophrenic confusional state is made, and in many cases medications are increased, with a predictable subsequent worsening of symptoms. When the possibility of drug toxicity is recognized, the usual clinical practice is to stop all drugs, thereby causing the patient to be without the benefit of any antipsychotic agents. Consideration of the possibility of anticholinergic toxicity, careful mental status examinations, and thorough physical examinations focusing on the presence of peripheral anticholinergic signs may allow the correct diagnosis to be made and the selective, appropriate reduction or discontinuation of the medication to occur. In cases where the diagnosis remains uncertain or where the rapid alleviation of the anti-cholinergic symptoms is desirable, the use of physostigmine salicylate may prove a useful diagnostic and therapeutic tool.

However, the use of physostigmine salicylate involves the risk of excessive cholinergic-parasympathetic stimulation, especially for individuals in whom no anticholinergic activity is present. Such stimulation may present as tearing, salivation, rhinorrhea, sweating, pallor, miósis, hypotension, muscle weakness and fasciculations, bronchial constriction and dyspnea, nausea, vomiting, abdominal cramps, diarrhea, colic, biliary colic, urinary frequency, bradycardia, and asthma. Thus physostigmine should be used carefully or not at all in diseases in which cholinergic stimulation may be deleterious, such as ulcers, diabetes, hyperthyroidism, gangrene, ulcerative colitis, bowel obstruction and other gastrointestinal disorders, cardiac disease, respiratory disease such as bronchial asthma, bronchitis, and emphysema, bladder obstruction, glaucoma, pregnancy, myotonia congenita, and myotonia atrophica (12). The signs of cholinergic toxicity are often effectively alleviated by administration of up to 1 mg. of atropine sulfate given intramuscularly or intravenously (12, pp. 535–536).

We have found that an intramuscular injection of 4 mg. of physostigmine salicylate effectively reverses the anticholinergic toxicity in our subjects. Others have recommended from 1 to 4 mg. in the treatment of the central anticholinergic syndrome (13, 16, 17). Since, in cases of uncertain diagnosis, where 4 mg. of physostigmine may precipitate excessive parasympathomimetic stimulation due to lack of anticholinergic blockade, it is advisable to use physostigmine conservatively. We recommend the use of a 1 mg. intramuscular test dose of physostigmine followed 20 minutes later by an additional dose of 2 or 3 mg. Alternatively, physostigmine may be administered every 20 minutes in 1 mg. doses until symptoms are alleviated or until 4 mg. have been administered. Repeated injections are sometimes necessary if the physostigmine effects decrease before the anticholinergic effects have ceased.

It is important to note that, like others (15), we have found physostigmine salicylate difficult to acquire, since its noncentrally acting analogue, neostigmine, has superseded it in general clinical usefulness. From our survey we could find only one manufacturer in this country who produces injectible physostigmine (S.F. Durst and Co., Philadelphia, Pa.). Also, since it has no central activity, neostigmine is theoretically useless in treating the central anticholinergic syndrome.

We believe that it is likely that the anticholinergic effects of the antiparkinsonian agents, phenothiazines, and tricyclic antidepressants have an additive effect in precipitating the central anticholinergic syndrome. Indeed, phenothiazines have been shown to potentiate the effects of the anticholinergic coma produced by the anticholinergic agent N-ethyl-3-piperidyl cyclopentylphenylglycolate hydrochloride (21). Also, Davies and associates (4) have noted that 13 percent of all patients and 35 percent of those over age 40 treated with tricyclic antidepressants developed toxic confusional states. Significantly, 55 percent of these patients also were receiving perphenazine and benztropine plus a tricyclic antidepressant. In addition, the threshold for tricyclic toxicity in these patients appeared to be lowered, since five of 11 receiving a combination of drugs required less than 100 mg. of tricyclics per day to induce symptoms, while only one of nine receiving tricyclics alone developed the syndrome on less than 100 mg. per day.

Slovis and associates have shown that physostigmine can reverse tricyclic-induced central toxicity (19). Furthermore, Warnes (6), in reporting a series of nine patients with antiparkinsonian drug-induced confusional states, noted that one patient did not relapse when the antiparkinsonian agent was reinstituted and previously administered trimipramine was discontinued. All nine patients were also receiving either phenothiazines, tricyclic antidepressants, or both of these agents.

We have recently investigated whether chlorpromazine and/or imipramine can potentiate the anticholinergic effects of benztropine. In vitro experiments were performed on the longitudinal smooth muscle of the guinea pig ileum, using drug doses that produce approximately 15 percent reductions in a standard acetylcholine-induced contraction. Each drug added separately to the bath produced the following results: 5×10^{-9} molar benztropine = 16 ± two percent reduction; 5×10^{-7} molar chlorpromazine = 15 ± two percent reduction; and 4×10^{-7} molar imipramine = 14 ± two percent reduction. When all three drugs (at the doses previously cited) were added to the same bath, a 64 ± five percent contraction reduction was obtained. Since the percentage of reduction produced by the three drugs in combination is 19 percent greater than the additive inhibition of the same drugs acting alone, potentiation would appear to occur.

These data indicate that with our in vitro test, chlorpromazine and imipramine are approximately 1/100th as

effective as benztropine as anticholinergic agents. However, typical clinical daily doses of these drugs are as follows: benztropine, 4 mg., chlorpromazine, 800 mg., and imipramine, 150 mg. Thus relatively high milligram doses of chlorpromazine (800 mg./4 mg. benztropine) and imipramine (150 mg./4 mg. benztropine) in relation to benztropine are given clinically. If these amounts are converted to millimoles (mM) of drug administered, the amounts given would be: benztropine, 0.01 mM; chlorpromazine, 2.8 mM; and imipramine, 0.5 mM. Estimating in vivo relative potencies (moles of drug x potency, compared to benztropine) results in chlorpromazine being 2.8 and imipramine being 0.5 times as potent as benztropine in the doses used clinically. Furthermore, one would expect that the drugs would potentiate each other's anticholinergic effects.

We would caution against the uncritical extrapolation from in vitro work to central effects in man. However, we would like to point out that both chlorpromazine and imipramine at clinical doses produce anticholinergic side effects such as dry mouth, etc., in man. Thus in vitro findings are compatible with our hypothesis that the toxic confusional states in patients receiving combinations of these drugs may be the result of their combined anticholinergic effects.

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Changing Styles in Psychiatric Syndromes: A Symposium

JOHN L. SCHIMEL, M.D., LEON SALZMAN, M.D., PAUL CHODOFF, M.D., ROY R. GRINKER, SR., M.D., AND OTTO A. WILL, JR., M.D.

A session of the annual meeting of the American Psychiatric Association in Dallas, Tex., on May 2, 1972 (a joint panel with the American Academy of Psychoanalysis), was devoted to "Changing Styles in Psychiatric Syndromes."

The participants were:

John L. Schimel, M.D., Associate Director, William Alanson White Psychoanalytic Institute, New York City, and Chairman of the Committee on Programs, American Academy of Psychoanalysis.

Leon Salzman, M.D., Deputy Director, Bronx State Hospital, and Clinical Professor of Psychiatry, Albert Einstein College of Medicine, New York City.

Paul Chodoff, M.D., Clinical Professor of Psychiatry, George Washington University Medical School, Washington, D.C.

Roy R. Grinker, Sr., M.D., Director, Institute for Psychosomatic Research and Training, Michael Reese Hospital and Medical Center, Chicago, and Professor of Psychiatry, Pritzker School of Medicine, University of Chicago.

Otto A. Will, Jr., M.D., Medical Director, Austen Riggs Center, Stockbridge, Mass.

Their papers are abstracted below.

Changing Styles in Psychiatric Syndromes: An Introduction

BY JOHN L. SCHIMEL, M.D.

TODAY'S SPEAKERS HAVE EACH SPENT 25 or more years in the practice of psychiatry. They are in a position to document the astonishing observation that the quality, intensity, and frequency—even the nature—of the syndromes of difficulty in living that come to the attention of the psychiatrist have changed during this period. It is not only the styles of the psychiatric syndromes that have been changing, however, but also the styles of the psychiatrists themselves. Although the changing psychiatrist is not the immediate focus of the papers, the members of this panel have been capable of changing with the times and have often been capable of anticipating and of pioneering significant changes.

My own psychiatric training experiences go back more than 25 years and include stints at St. Elizabeths Hospital in Washington, D.C., Bellevue Psychiatric Hospital in New York City, and various psychiatric installations in the Army during World War II, as well as psychoanalytic training. The most striking change during these 25 years is reflected in the current expectation that the psychiatric resident do something curative, or at least ameliorative, for his patients.

In my residency experience we functioned more or less like stock clerks in a department store: sorting, cataloging, and shipping patients to one or another warehouse. It was not very demanding work. It took my mind off my personal problems and I usually felt better after a day at the hospital. My work did not interfere with my propensity *not* to get involved with other people or to intervene in their affairs. I did not see any connection between my own discontents and the gravely disturbed patients with whom I was dealing, any more than I saw any connection between the state of my own robust health at the time and the tubercular or brain damaged. Being a psychiatric resident 25 years ago enabled me to enjoy what Erikson was later to term a psychosocial moratorium. I saw the humor but did not get the message offered by a patient at St. Elizabeths Hospital. This beautiful young black woman would dance before us as we made rounds, offering us scraps of paper and chanting: "Get your program here, get your program here, it is the only way you can tell the staff from the patients." At about the same time, or probably earlier, Harry Stack Sullivan was writing: "The patient is simply more human than otherwise." I got neither message.

My predicament arose from the fact that the psychiatrists I had met while in the Army who were psychoanalysts had impressed me and I had determined to become one of them. After some nine years of personal psychoanalysis my private life of reverie had been interrupted here and there; I could no longer so clearly see the differences between me and my patients.

The psychiatric resident of today, in some ways, skips the psychosocial moratorium the profession once offered and from the beginning is into the psychiatric bag of involvement and expectations of helping patients: in one-to-one patient encounters, in group therapy, and in crisis-oriented storefronts. He is bound to be a different kind of professional than his elder, although there are at present no data to indicate whether or not his professional role will be more socially constructive.

Changing Styles in Psychiatric Syndromes: Historical Overview

BY LEON SALZMAN, M.D.

WHAT DEFINES HEALTH OR ILLNESS, mental defect or mental health? The restrictions and limitations such labels can impose on an individual have consequences that go far beyond their immediate care and safety and involve prejudices and sanctions that can influence one's personal freedom. The degree of insecurity of the culture and its moral, ethical, aesthetic, and scientific standards enter into such definitions. Sociological, religious, and philosophical as well as decorous and conventional forms of behavior will also have a significant influence on diagnostic labels derived from scientific sources. In recent years, politics as well has entered into our nosological descriptions.

In 1848 Sir Arthur Morrison in his *Lectures on Insanity* in Great Britain said, "It is well known that the abuse of coition enervates the whole frame and in particular enfeebles the functions of the brain bringing on hypochondriasis, insanity and epilepsy. The baneful habit of onanism contracted in early youth frequently brings on imbecility of mind—sometimes mania and debility, moral as well as physical, so great as to incapacitate those who addict themselves to the solitary vice from any exertion either mental or bodily. The habit is particularly dangerous in old men, more especially if means are taken to produce excitement. I may here remark that an inordinate propensity for coition or onanism, together with an unusual desire for strong liquors, is sometimes the first sign of mental derangement" (1).

In a brilliant exploration of the Western orientation toward insanity, Michael Foucault (2) portrayed the changing attitudes toward madmen, who were considered part of everyday life and walked the streets in Shakespeare's plays and in Cervantes' *Don Quixote*. Only later were they considered public threats and dangerous to society. His study, extending from 1500 to 1800, suggested that mental illness is determined by complicated scientific, artistic, and religious phenomena, so that the view of the insane ranged from seeing them as tragic and unhappy individuals to seeing them as dangerous criminals requiring isolation and confinement.

WHAT CONSTITUTES MENTAL ILLNESS?

At the extremes our definitions can at times be precise and unequivocal. This is particularly true when we deal with those disorders which are physiological in origin and demonstrable in precise symptomatology. However, when we try to identify the subtleties of disorganization or maladaptation that arise out of our psychological capacities, we run into innumerable difficulties. In such instances we begin to deal with cultural definitions that are related to value systems and not to the basic physiological functioning of the organism. The differences between adaptive and maladaptive functioning will vary from culture to culture and will be more or less acceptable depending upon one's economic or social status.

Our conception of the etiology of altered functioning has a marked influence on the label applied to the phenomenon. The concept of disease as it advanced from a primitive magical basis to the ideas of a disturbance of bodily humors, germs, and finally a multicausal, highly sophisticated biochemical basis required a drastic revision of the prevailing classifications.

This is more notably the case in the psychological disorders, since nosology is intimately tied to the state of religious as well as scientific knowledge and to the existing sociocultural prejudices and preconceptions. Because we have no objective standards that can clearly identify or define mental health, we use a variety of determinants that grow out of our conceptions of mental health derived from moral and religious sources. When our knowledge of growth development is meager we are unable to distinguish between the normal physiological and the cultural requirements of behavior, and we tend to label any deviations from the cultural norm as disease processes. Behavior, rather than some underlying disease process, becomes the criterion. This is strikingly confirmed in our changing attitudes toward masturbation, which I referred to earlier. This fact can be documented over and over again. Because science develops in a cultural and historical context, it is contaminated with prescientific myths and superstitions. This unfortunately lends support to the periodic quasi-scientific attacks on psychiatric concepts which imply that mental illness is a myth or a political entity designed for exploitative purposes because it does not follow the medical model of illness or have laboratory tests to identify it. Instead of recognizing the validity of emotional disorders in a framework other than the historical medical-physiological pattern, these critics latch on to the deficiencies in our science due to its youth and inherent complexity and its present incapacity to identify the organic changes that may underlie many of our emotional disorders. With increased knowledge and greater sophistication we will be able to distinguish the disordered from the dissenter and the maladapted from the innovative, discontented individual.

Theoretical advances in the social sciences and psychiatry are generally slow and undramatic in contrast to the revolutionary and dramatic changes that occur when a new paradigm is introduced in the physical sciences. This makes the problem of revising our classification systems more difficult, since no definitive proof is forthcoming, nor can crucial tests be applied. The theory of relativity had a more profound influence upon the physical sciences than the cultural or social theories of personality development have had upon the social sciences. Yet they have both produced profound changes in the theoretical approach to the study of physics and psychiatry. Although there have been several revisions in psychiatric nomenclature in recent years, diagnostic categories still reflect outmoded philosophical or scientific attitudes. Thus it is not surprising to discover that the status of epilepsy as a spiritual disorder has only recently given way

to its recognition as a disease due to some abnormal focus in the brain. Only in the last 200 years have obsessional states not been considered to be states of possession in which either the devil or the Holy Spirit could overtake and reside in an individual and control his living.

CULTURE AND NOSOLOGY

In 1886 Krafft-Ebing described a case history in his *Psychopathia Sexualis* as follows: "According to the statement of his wife, the whole time of their married life covering a period of 28 years he was hypersexual, extremely libidinous, ever potent, in fact insatiable in his marital relations. During coitus he became quite bestial and wild, trembled all over with excitement and panted heavily. This nauseated the wife who was by nature rather frigid and rendered the discharge of her conjugal duty a heavy burden" (3).

Would we call this a disease today or the ideal of every woman? What would happen if we applied our present-day understanding to yesterday's categories of illness? In some instances we would need minor revisions, while in others we would need to make major theoretical and practical alterations even in such well-known categories as hysteria and schizophrenia. There is considerable agreement on the proposition that the cases described by Breuer and Freud in "Studies in Hysteria" would today be labeled schizophrenic.

Premature ejaculation is another condition that illustrates this thesis. When did premature ejaculation become an issue in men? It is clear that this syndrome did not exist prior to the emancipation and enlightenment of women. It is only since it has become possible for a woman to insist upon satisfaction from sexual activity that the problem has arisen. Although orgasm in the female did not occur frequently, this did not become an issue for the male until her pressure and insistence about her right to have pleasure too made it so. According to Krafft-Ebing, abnormally easy ejaculation is due to "excessive physical excitement or irritable weakness of the ejaculation center." Forel, in his book *The Sexual Question,* did not even mention this problem. I have had great difficulty in finding any article on this subject prior to 1900, and Dr. Ernest Jones said: "My impression is that hardly anything was written on that subject prior to Freud" (4).

Quite often a disease that has a variety of behavioral manifestations may be viewed differently in the same culture. For example, compulsive behavior is viewed quite differently when it involves an addiction to alcohol or drugs than when it involves the tendency to steal, as in kleptomania, or when it involves the tendency to overeat, as in obesity. Thus it is not so much the character trait or behavior that determines the consequences as the social, political, or religious attitudes toward the behavior. One may go to jail, be considered a saint or a sinner, or else be viewed as diseased and treated with care and concern.

Nowhere is this notion of cultural influence more marked than in our attitudes toward sex and maleness and femaleness, or in our attitudes toward qualities that characterize the Protestant ethic, such as industry and involvement, in contrast to the Eastern styles of detachment. Thus we come to grief over definitions of femininity and masculinity, and we use pejorative labels for certain aspects of behavior that indicate homosexual or latent homosexual tendencies, or activities designated as lazy, slothful, sinful, or the like. Here we must recognize that we are dealing not with medical or scientific statements but with cultural prejudices and preconceptions.

It is equally clear that our treatment modalities are also heavily involved not only with prevailing scientific conceptions but also with the culture. The value of work as a preventative and cure, which is related to the Protestant ethic, needs to be contrasted with the value of knowing oneself and achieving the sense of detachment that characterizes some of the Eastern philosophical systems. It has given rise to psychoanalysis, with its influence and acceptance in the West, even while it is being altered by existentialist and Eastern influences.

MEDICAL AND NONMEDICAL MODELS OF ILLNESS

The science of nosology, which was related to the healer or medical model, requires a drastic overhaul when the model gives way to a sociocultural or developmental model in which disordered living may or may not be an illness. Such psychological malfunctioning need not follow the medical model but instead could be considered a maladaptation that renders the individual less effective and less adaptive as a functioning animal. The shift from a medical to a nonmedical model of illness must also take into consideration the prevailing modes of healer-patient interaction. Three varieties can be noted:

1. The wise, magical healer relationship in which the healer is possessed of spiritual virtues and wisdom and is able to alter the behavior of individuals in striking ways. The patient is required to accept the authority, whether it be a physician, psychoanalyst, or priest, with faith and spiritual conviction.
2. The skilled, detached scientist who is uninvolved and ruthless, although somewhat less grandiose in that he recognizes his limitations and his responsibilities. He functions also as a specialist who attempts to directly influence disturbed functioning but uses techniques that do not depend entirely upon his charisma and magical qualities.
3. The expert partner relationship, in which the helper is a supportive individual who guides and encourages with his knowledge and understanding and enables the patient to grow through his own understanding.

These three models relate to the spiritual, charismatic, and authoritarian therapies based largely on faith, and those which attempt to educate the individual to mental health. The categories are related to our knowledge and understanding of disease processes and determine the character of health delivery systems. Consequently, our capacity to heal influences the disorders that require heal-

ing. As this occurs the prevalence of certain syndromes will become apparent while others will disappear. What is considered to be abnormal today may be considered healthy and reasonable tomorrow. This is true with our major disorders like the psychoses as well as with the widespread behavioral changes manifested in the neuroses. Therapy will ride hard on our changing concepts, as we have witnessed in the 40-year span that has included shock therapies, lobotomies, drugs, and a multitude of individual and group therapies.

Changing Styles in the Neuroses

BY PAUL CHODOFF, M.D.

THE TERM "NEUROSIS" was born in 1769 when William Cullen first used it to designate a general class of diseases due to "disordered motions or sensations of the nervous system" (5). Included were a mixed bag of neurological, psychiatric, and medical conditions; it is clear that Cullen meant something very different than we do today. However, his contribution was significant because he introduced not only a name that took root but also the idea of functional illnesses (6)—those due to deranged physiology but without pathologic alteration. In addition, by replacing the dominance of the body humors with that of the nervous system, Cullen made it possible for certain individuals to complain of suffering from "nervousness" rather than "the vapors," being "out of humor," or possessed of demons, as they might have done in previous epochs.

During the century after Cullen, what was meant by neurosis gradually approached its current state as scientific medicine expanded and the true cause of many diseases was understood, thus allowing a separation of functional or psychogenic conditions in which emotional or "moral" influences were determining factors from those definitely attributable to organic lesions. Conditions that today are included within the loose confederation of the neuroses share certain characteristics. First, they are nonorganic in their origin, although not necessarily in their consequences, and are considered to be the product of psychologic-social forces. Second, judged by certain practical standards such as the ability to adapt to reality by living outside of a hospital, they are less severe aberrations of behavior than are the psychoses. A third, less obvious, characteristic lies in the great sensitivity of neurotic styles of living to broad cultural trends as these differ from place to place and from one historical epoch to another.

It is this third characteristic that is the topic of my discussion. I will try to convince you of its truth first by a brief review of the recent history of the neuroses as summarized in Ellenberger (7). In the 18th century, Ellenberger tells us, women suffered from the "vapors" and men from hypochondriasis. Ellenberger attributed the disappearance of the former condition to the decline of the aristocracy, but another factor may have been the loss of popularity of the old humoral theory. Hypochondriasis became old-fashioned by the 19th century and was replaced by what was called the "wear-and-tear syndrome" (1831), attributed then to overwork, lack of exercise, and the smoky air of the cities during the Industrial Revolution. A similar disease was described in the United States in 1869 by George Beard as neurasthenia, also a disease of men. However, as neurasthenia became an increasingly popular diagnosis it came to be attributed more to constitutional factors and the malign effects of masturbation than to overwork. By the end of the 19th century the main neuroses were hysteria for women and neurasthenia for men.

The latter half of the 19th century saw the introduction of a condition later to be called phobia and destined to proliferate into a lexicographer's paradise of subtypes. Another new condition called cerebro-cardiac neuropathia entered the field and was the prototype for what was later to be called anxiety neurosis. As industrial accidents, with their resulting train of insurance claims, became common in the 20th century, the diagnosis of traumatic neurosis achieved a new prominence.

HYSTERIA

There is no psychiatric entity whose vicissitudes better illustrate the profound influence of historical and cultural forces than hysteria. First it was attributed to the peregrinations of a wayward uterus, then to possession by demonic spirits, then to hereditary degeneration of the brain, and at various times throughout its history to the influence of incompletely expressed or distorted sexuality. For the early Freud, hysteria was considered preeminently a sexual neurosis: the patient's repressed and dammed-up sexuality expressed in symbolic fashion. Although he changed his theory of hysteria in various ways, Freud continued to consider hysteria a product of the inability of the sufferer under certain conditions fully to express his genital sexual impulses (8).

However, since Freud there has been a considerable change in the way psychoanalytic workers regard hysteria. Increasingly, pre-oedipal and specifically oral elements have been emphasized; a recent review of the subject (9) described two kinds of hysteria, the oral and the phallic. The latter label is applied to individuals who do not appear to depart very far from normality, while the oral hysterics are the sicker ones. I regard this change in the way psychoanalysts view hysteria as part of a largely unacknowledged but real retreat from sexuality as the most important organizing and explanatory principle in the study of the neuroses. As is illustrated so cogently in the case of this development in hysteria, the sexuality of later psychoanalysis, in contrast to that of the early Freud, has become tame, in a sense demythologized, no longer a fierce torrent periodically overflowing its banks but rather a broad estuary covering much territory to a shallow depth but with little force and difficult to distinguish from the sea into which it flows. Or to use a differ-

ent metaphor, a dowager matron looking back with satisfaction on her hellion past.

NEUROSIS TODAY

The increasing difficulty in classifying neuroses in the 1970s is the wide variety of behavior that today is considered neurotic. If we agree to a broad rather than a narrow definition of neurosis, using as our criterion that the individual seeks psychiatric or other psychotherapeutic help for some form of nonorganic personal distress that does not seriously interfere with reality adjustment or require hospitalization, then we must include a broad spectrum of maladaptive behavior—the classical symptom neuroses: phobias, anxiety states, depressions, obsessive and compulsive symptoms, and hysterical conversion reactions; the psychoneurotic personality disorders, characterized not by distinctive symptoms but rather by persistent, aberrant overall life-styles such as the hysterical and the obsessive; and we must also include as neurotics persons who are distinguished neither by specific symptoms nor by a persistent characterizing life-style but rather by certain restricted behavior patterns manifested in their relationships with other people. There are in addition those individuals who seek psychiatric help because of existential problems such as loneliness, despair, unhappiness, lack of fulfillment, or an uncertainty in their sense of personal identity.

This alienated man is not a new arrival. He was described by Karl Marx, and we can recognize him in Melville's Bartleby. Today we increasingly have our attention called to him as the paradigm personality of our age in the form of "Protean Man" (10), who regards himself as a commodity to be marketed. With a fragile enough ego, he may even become Grinker's borderline patient (11). A reed in the interpersonal winds, he seems to feel a tropism toward whatever stronger force will lend him definition and boundaries. In an earlier age he may have sought his salvation through religion; today he seeks it through psychotherapy.

Are we to conclude that we are living in a new Age of Neurosis as the mental health of our citizens bends under the stresses of modern living? Despite doomsday cries to this effect, I think it more likely that what has changed is not so much the vulnerability to neurosis as the readiness to label as neurotic forms of personal discomfort and maladaptive behavior that previously would have been considered within the bounds of the normal.

The reasons for this extension are complex; it is a by-product of some of the same broad social, cultural, and historical tides that are responsible for the fact that we live in a different world than our ancestors of the 19th century. There are, for example, the persistent effects of that 18th-century French heresy, the idea of Progress: the conviction that man is perfectible—that all problems are soluble and that citizens are entitled not only to the pursuit of happiness, but to happiness itself. Also, since religion has lost much of its influence, many people have transferred their allegiance to the new priesthood of science and to its medical exemplars in psychiatry in order to be helped to seek their birthright of contentment and freedom from discomfort. The result is that, in spite of the fact that Sigmund Freud denied even the theoretical possibility that man is perfectible (12), psychiatrists have in a sense become "Doctors of Happiness."

Also, society has legitimized and sanctioned an expansion of the sick role, thus allowing under its umbrella the inclusion of many problems that otherwise might be considered moral rather than medical. Szasz (13) fulminated about the hypocritical aspects of this development and claimed that by transferring moral conflicts into the domain of medicine, and by welcoming the victims of such conflicts into the consulting rooms of psychiatrists, society has evaded its responsibilities to deal effectively with the social conditions that produce these problems. We have in a sense substituted motivation for morality, so that attitudes and kinds of behavior that previous generations would have taken at their face value now fall under psychoanalytic scrutiny and become examples of neurosis. A recent report of the GAP Committee on Child Psychiatry (14) pointed out that the concept of emotional illness was not used with respect to children until 1925; before that time children were not supposed to suffer from any psychological complaint except mental deficiency.

It is not only psychiatrists, with their neurotic caseloads, who feel the impact of the forces I have been describing. Physicians generally—especially those of first resort like general practitioners and internists—have noted the considerable number of patients who consult them not with well-defined and clear-cut illness but rather with vague complaints that often can be seen as serving as a vehicle for personal or social disabilities.

DIAGNOSTIC LABELING

The consequences of the widened view of neurosis are profound. First, what are its effects on diagnostic labeling in psychiatry? I am aware that the practice of attaching labels to complicated states of human distress is viewed in certain quarters with something close to contempt. However, if for no other reason than the recent increase in health insurance arrangements, psychiatrists who elect to receive their fees through insurance must act like doctors sufficiently to make medical-model diagnoses (15). But with the best will in the world it is often very difficult for psychiatrists to find appropriate diagnostic labels for some neurotic patients they are treating. What diagnosis is to be made, for instance, of a man who comes for treatment for the very good reason that he finds himself chronically restless and dissatisfied and recurrently involved in interpersonal situations in which people become fed up and irritated with him, thus jeopardizing both his marriage and his career? There is no question of psychosis in this case and although he may display certain characteristics of, say, the obsessive personality, the better one gets to know him the less one is satisfied with such simplistic generalizations. What often actually happens

in such cases when insurance reporting is involved is that the psychiatrist will mark down "depression" or "anxiety neurosis," knowing that this is really a very inadequate way to characterize the human being he is dealing with.

And what about treatment of the psychoneuroses? The model for exploratory rather than supportive psychotherapy has been based on the assumption that improvement takes place as a result of insight through derepression. However, this model does not seem to work very well in many of the cases I have been describing, since for these patients the unconscious seems to have lost a good deal of its mysterious and noxious quality, while the developmental arrest that has left them emotionally handicapped may have been due to the fact that they were *deprived* of certain experiences rather than having had to *repress* pathological experiences (16). In a way, they seem to be attempting to change their future without undoing their past; this causes difficulties for therapists whose training has pointed them toward the latter mode of therapy.

EVALUATING RESULTS

When we come to the questions of establishing criteria for evaluating the results of psychotherapy, we again find that the new kind of neurotic caseload has compounded this difficult task. The removal through psychotherapeutic help of a specific and definite symptom like a phobia or a counting ritual, although it may have been only part of the story, at least afforded a clear-cut basis for determining whether or not the treatment had been successful. However, now that such symptom neuroses are in the minority, success or failure in psychotherapy must be gauged more by attempting to evaluate the sometimes vague and even utopian goals of total personality change. Therapy operating on this basis runs the risk of becoming a matter of subjective agreement of patient and therapist, with all the attendant possibilities of transference-countertransference distortion.

It seems to me that we have come full circle from Cullen's time. Our "neurosis" is as much a mixed bag as his, although where his included medical, neurological, and psychiatric disorders, ours contains a heterogeneous stew of psychological, social, moral, and existential ingredients. Today the usefulness of neurosis as a categorizing label has become compromised; perhaps styles in neuroses have changed to such a degree in the 1970s as to raise real questions about whether the term ought to be retained at all.

Changing Styles in Psychoses and Borderline States

BY ROY R. GRINKER, SR., M.D.

CLINICAL PSYCHIATRISTS HAVE OBSERVED unmistakable changes in the form and content of neuroses and psychoses during at least the last 20 years. For example, at both Michael Reese Hospital and the Illinois State Psychiatric Institute during 1970 only 1.70 percent of the patients were manic, 0.63 percent were catatonic, and only two percent of those with organic brain diseases were diagnosed as psychotic. Unfortunately we have no adequate comparative statistics from past years nor do we know if the absolute numbers of psychotic schizophrenics or manic-depressives have changed. But we can document the changing form of what we see. The psychoses are shorter lasting, less detached from reality, and less dramatic.

How can we explain these phenomena? It has been suggested that the antischizophrenic and antidepressant drugs have affected the form and course of psychiatric entities. However, the psychoses developing even before the legitimate use of drugs are less dramatic than in earlier eras. In our investigations of young first-break schizophrenics we have observed that the acute psychotic break is short-lived and that the subjects remember and honestly recount the details of their delusions or hallucinations. On balance these patients revealed more affect than usually described. They were depressed, lonely, and devoid of feelings of pleasure, with relatively little cognitive disturbance or associative slippage. They seemed in general to recognize their social limitations and seriously attempted to adapt to their schizophrenic process.

In the psychotic we are always concerned with how much the premorbid character and personality influences, modifies, or covers the basic psychological disturbance. We are concerned with the effect of the cultural matrix—how much of the psychosis is cultural-fair or cultural-free (17)—and what is the threshold for tolerance of deviance within the subject's social group? Finally, there is an astonishing difference in diagnoses made by psychiatrists from various countries. For example, schizophrenia is diagnosed much more frequently by American than by British psychiatrists, who in turn diagnose manic-depressive psychoses more frequently. The logical conclusion seems to be that we pay more attention to the cognitive defects in schizophrenia, recognizing that the affective component is an early and often predictive element in the schizophrenic process. The English pay more attention to the depressive and anxious phases and hence diagnose affective disturbance more frequently.

CAUSES OF PSYCHOTIC BREAKS

To explain the changes in the psychoses observable during the last several decades it is necessary to define the factors involved in the multicausality of psychotic breaks. I will list a few.

Biogenetic. Modern techniques for the study of chromosomal aberrations have not progressed sufficiently to isolate genic differences, even in those syndromes for which clinical evidence suggests a biological component. But there is some evidence that manic-depressive syndromes (either unipolar or bipolar) reveal a family his-

tory and are linked to other genetic faults. Recent work has indicated that the schizo-affective syndromes are related to family histories of depression.

On the other hand, the percentage of schizophrenic syndromes in monozygotic twins has dropped considerably since Kallmann's original studies. But high-risk children, whether raised by biological or by adoptive parents, develop schizophrenia with greater than expected frequency.

None of the neurotic syndromes or others such as the borderline, delinquency, or drug abuse syndromes have so far revealed any biogenetic factors. However, the high incidence of such conditions in the families of diagnosed schizophrenics raises a question about the existence of biogenetic factors; that is, they may represent varying phenotypes of the schizotypic genotype. It would indeed be surprising if profound changes in the genetic pool occurred in the last two or three decades to account for changes in any of the psychiatric syndromes. In fact, the decrease in the state hospital population (mostly schizophrenics) began several decades before the advent of the phenothiazines. These drugs have decreased hospital stay, but readmissions have increased.

Child rearing. Practices vary within ethnic groups, as Spiegel (18) has shown, but the most significant changes are general and cut across all groups. These include a decrease of the extended family, absent working mothers, greater freedom and independence for the child, and less conformity to rules and regulations.

Family. Much has been written recently concerning family dynamics, their internal and external systems of communication, decision-making processes, and the "scapegoating" of one family member. Some of these theoretical concepts have taken hold temporarily but careful empirical research has negated the application of most of them; the findings, however interesting, have yet to demonstrate the precise causal link to the changes we have observed.

Social system. Our social environment has been changing rapidly. Hysterical conversion symptoms practically disappeared with the increased sophistication of the population, especially with respect to sex. Changes in technology have affected the content of paranoid delusionary symptoms and hallucinations. Our society has altered its view of behavior: in general there is a higher tolerance of deviance. More escape valves now exist for aggressive behavior and rebellion against conformity in the communes than have existed since the closing of the western frontier. It is possible that the dramatic acting-out characteristics of excited psychotics are now hidden from public view but exist as part of the youth culture.

Cultural. This factor concerns the firmness with which institutional controls are internalized within the individual and the general cultural attitude toward deviant persons. The profound regressions that we used to see are now considered "social breakdowns" rather than an intrinsic part of the psychotic process. With the advent of more humane treatment in most state hospitals, the kind of profound regressions that 20 years ago were common are now rare.

SOME SPECULATIONS

Since one can make no definitive statements about the causes of the decrease in extreme and bizarre types of psychosis, one is forced to speculate. Nonhospitalized or discharged schizophrenics seem to maintain hope and are oriented toward rational, active strivings. Young schizophrenics interviewed during their first breaks openly recount accurate details of their delusions and hallucinations. For many of them there are subcultures within the general society in which they can live relatively unnoticed. In communes and in the drug culture, with their general permissive attitudes, schizophrenics can live without psychotic-precipitating stimuli.

It seems to us that the schizophrenic tends toward psychosis not only in alienation from the self but also alienation from his stressful world. As described by Deikmann (19), he retreats from angry action. As a result his own boundaries become blurred and the external world is not integrated. The receptive mode dominates and he becomes aware of his own individual fantasies or presentational thinking in the form of hallucinations. In this phase his psychosis is peaceful and mystical but not dramatic, because he avoids aggressive action. When he attempts to reorder this form of thinking he may become paranoid and destructive, very much like the user of LSD on a bad trip (20).

If the action mode were completely abolished there would be no corrective proprioceptive feedback (21), and the internal world would be in uncontrolled chaos. However, the schizophrenics studied by our research groups have not relinquished action to an absolute degree; most of them actively and hopefully attempt to find their place within the common culture.

Our research group has observed that self-acceptance of psychiatric disability facilitates adjustment to the deficit. ("I am a schizophrenic; I know my limitations and I have lower expectations.") Adaptation to the sociocultural mainstream by lowered ideals, isolation when necessary, and membership in groups with common problems are methods adaptive to one's defects. It is as if schizophrenics learn how to be schizophrenics within the common culture. They also recognize their dependency on medication and clinics.

What all this means is that we have a changing phenomenology in deviant personalities and psychoses. However, articulation with biological, sociological, and cultural systems is not yet possible. I am sure that the changes are not artifacts in diagnosis or labeling. But the how and why are still unknown.

Changing Styles in the Treatment of Schizophrenia

BY OTTO A. WILL, JR., M.D.

"IF YOU CANNOT BEAR THE SILENCE and the darkness, do not go there; if you dislike black night and yawning

chasms, never make them your profession. . . . Seek out the sunshine . . . avoid the darkness" (22).

This statement by the anthropologist Loren Eiseley could be a cautionary note to those who engage in psychotherapy in general and in the treatment of schizophrenic people in particular. The disorder has been looked upon as mysterious and dreadful, its nature undetermined, its outcome dismal, and its treatments multiple and generally unsatisfactory. The psychotherapeutic enterprise has been marked by qualities of caution, fear, and hopelessness, suggesting that personal involvement with the schizophrenic person is forbiddingly dangerous.

The term "psychotherapy" as used here refers to the planned employment of the human relationship in an effort to bring about desirable changes in someone troubled in his living. Treatment is an ongoing process during which particular goals suited to the needs, capabilities, peculiarities, and opportunities of the patient are recognized, defined, and sought. In general terms the goal is the attainment of a form of personal freedom in which the major aspects of the self are available to awareness and recognized as being a part of one, the ways of relating to others are known, the aloneness of existence is accepted without resort to restrictive mythologies, interpersonal attachment and separation are understood as necessary and inevitable, change and uncertainty are tolerated, and choices can be made from those options for action which may be open. Therapy in this sense is not simply a technique applied impersonally to an object, but is an interpersonal transaction directly involving two or more people and, indirectly, the psychic representations of many more; it is concerned with events of the past and the present, and with expectations of the future. It is a part of the society and the culture in which it takes place.

PERSONAL EXPERIENCE AND THE CONCEPT OF SCHIZOPHRENIA

When I was growing up in a small western town there was locally no great sympathy with or understanding of mental disorder. Mild deviations from the established norm were acceptable, and some instances of "feeblemindedness" and supposedly harmless craziness were tolerated. Much of what we might now call psychiatric trouble was denied, named something else, laughed at, whispered about, hidden away, or driven out of the community. We didn't talk very much about these matters because we were ashamed and afraid; they were associated with dirt, weakness, and some kind of personal inadequacy—as were venereal diseases and even tuberculosis. The afflicted person was looked upon as dangerous or loathsome; if he did not rapidly abandon his deviancy he was likely to be "put away," an act often concealing the wish to destroy him.

As a student in college and medical school I found similar attitudes despite our efforts to be more objective and understanding. Associated with the patient were feelings of awe, disgust, fear, mystery, and (for some) fascination; he often appeared to be untouchable, a social leper, an object whose peculiar behavior might be without meaning or purpose and could be put on display or demonstrated by the learned for the edification of those relatively untutored.

In the medical tradition psychiatric conditions had come to be looked upon as disease: emphasis was placed on biologic-genetic events rather than on interpersonal-social-cultural phenomena, or a useful combination of these. But the difficulties of treatment and the social deterioration evidenced in prolonged institutionalization contributed to the disorder's being looked upon as a "living death." The opening of the door to psychotherapy was hindered by the idea that the patient could not readily establish a transference (a relationship) and that disaster might result from persistent attempts to form one.

The patient did not fit well into the medical model. In the large psychiatric hospitals the inhabitants lived marginal existences, their needs for food, shelter, clothing, and humane care frequently met inadequately. In those days—at least where I worked—the psychiatric residency was not popular; it ranked below surgery, medicine, and pediatrics. If you went into psychiatry, you were likely to be thought of as being a bit odd or something of a failure.

My interest in psychiatry declined as my early education in the field increased. The patient seemed to be something of an outcast, and I feared that by association with him I might find a similar fate. Just as I was getting to be a little comfortable in my new role as a physician I didn't welcome dealing with people who were unable to accept me in that role. I had learned to deal with a person professionally and as something of an object. I "took" a history, I "made" a diagnosis, I "gave" treatment, and I "administered" medicine. There was nothing in my education that enabled me to listen and to talk simply with another person. In psychotherapy the patient didn't assume a proper stance vis-à-vis mine, and as a result I felt uncomfortable and unappreciated; I didn't want to lose the still fragile security that I had found in being a "doctor."

For some years I dealt with large numbers of patients, having little time for any one person. I sought to produce change without knowing the nature of the condition to be changed or the goal desired, except for its superficial resemblance to conventional "adjustment." I was familiar with the use of insulin, Metrazol, electroconvulsive therapy, prolonged sleep, hydrotherapy, barbiturates, lobotomies, and so on. Displeased with myself and the task, I sought release by labeling myself unsuitable and the task too difficult, if not impossible.

Circumstances then led to my having the opportunity to spend a great deal of time with a withdrawn, mute patient who had failed to respond to a variety of treatments. Of necessity I put aside the paraphernalia of my ordinary medical work and found that I must listen and observe but for the most part not to otherwise act. No miracles were achieved but the patient became a person to me, and he showed me aspects of myself that were discomforting. Through personal therapy I looked as best I could at my own background, motives, values, and goals,

and I realized that what I saw could be on occasion useful if not pleasing. The schizophrenic patient was of particular interest as he persistently challenged any tendency to feel that one had "found the answer." Of greatest importance to me was the idea that to be psychotic was not to be somehow inhuman. As I came to know the patient as a person he was found to be in significant ways like myself, a finding applicable to all "strangers" and of increasing value in a world of easily breached national boundaries.

MAJOR DEVELOPMENTS IN THE PAST 50 YEARS

There have been a number of developments in psychiatry during the past 50 years that have enlarged the concept of psychotherapy, particularly as applied to schizophrenia. I will note briefly those which have influenced me to the greatest extent.

Patients. If one can keep some of his wits about him and not succumb too readily to anxiety and those forms of behavior designed to reduce its discomfort, he can learn best from intimate contact with patients. Many students have the opportunity to observe large numbers of patients, but only a few have the privilege of spending long periods with any one person. When one meets day after day with a patient, setting himself to observe what goes on, much of great interest about the transaction is likely to be revealed.

Teachers. One's own observations and learning may be limited by certain personal qualities, by anxiety, and by lack of professional contact. The student needs the teacher, revealed through personal association as well as writings. For me there were Hilde Bruch, Dexter Bullard, Frieda Fromm-Reichmann, Lewis Hill, Harry Stack Sullivan, and others. From them I learned that there was much that I had seen but not recognized and that hard work, some clear thought, persistence, and compassion can accomplish much in situations prematurely labeled hopeless.

The milieu. Studies of the environment in which the patient lives emphasize that psychotherapy is not carried on in a social vacuum. Since the work of Sullivan in the 1920s, increasingly systematic studies have been made of the social structure of institutions, and attempts have been made to define and sort out the antitherapeutic from the therapeutic influences (23).

The family. Studies of family relationships have demonstrated that these are influential not only in terms of the past but also the present and the future. Family members could no longer be ignored, dismissed as "bad," or accepted as "good"; they had to be considered in the planning and carrying out of any serious therapeutic effort.

The field. Psychiatric disorders, once thought of as reflections of disease within a person, came to be viewed by some observers as phenomena operating within a social field or interlocking biological, social, and cultural systems. The patient's behavior could be thought of as an attempt to deal with a total life situation, including past experience as a molder of personality, present influences, and expectations of the future. The growth of a variety of "therapies"—family, group, milieu, and social, in addition to psychoanalytic and interpersonal—reflects the increased concern with the human relationship as a vital factor in human development and survival.

Ethology. Studies of animal behavior are potentially useful if one keeps clearly in mind the fact that man is man and is not to be comprehended through careless translations of observations of fish, birds, dogs, wolves, and so on. Man's instinctual resources seem to be less than we thought some years ago; what he is reflects the interweaving of his biological substrate with social-cultural influences and interpersonal experience.

Throughout these past 50 years the field of psychiatry has been greatly expanded. Developments in anthropology, sociology, religion, and philosophy, as well as in biochemistry, neurophysiology, and pharmacology, have been recognized as relevant to our work. The psychiatrist, inevitably involved in human living in multiple ways, has knowledge too valuable to be restricted to the consulting room and to those officially designated as patients. The rapid growth of the concept of community psychiatry is evidence of the recognition of this idea.

CONCEPTS OF SCHIZOPHRENIA

Relevant to the psychotherapeutic procedure is the therapist's concept of the difficulties with which he is working. As a therapist my current view of schizophrenic phenomena includes the following ideas.

The schizophrenic problem, greatly simplified, is that of maintaining required human relationships without the experience of intolerable anxiety. An intense relational bond was formed in infancy with the mother and in the family. There also was found insecurity to the extent that relationships could be maintained only through such distorting devices as dissociation, denial, and obsessional substitutions.

The schizophrenic phenomena with which I am concerned appear in florid form in adolescence, a time of great demand for growth, increased interpersonal intimacy and self-revelation, and separation—from places, people, ideas, values, and concepts of the self. For one whose sense of identity and personal security has been uncertain and fragile, such demands are difficult to face without the arousal of great anxiety.

The essential schizophrenic condition is a state of panic and personality disorganization demanding rapid resolution. The psychotic performance, despite its seeming craziness and incomprehensibility, is a response to conflict, an attempt to solve a problem, and is goal-directed. The problem is vital to continued existence. How can you hold on to relationships required for survival without becoming so insecure that you become "crazy"? The schizophrenic answers include the oversimplified and difficult-to-modify hebephrenic and paranoid "solutions," the rebuilding of defenses with a further limiting of possibilities for creativity and growth, and changes ac-

complished by insight and the ability to profit from new experiences.

PSYCHOTHERAPY OF SCHIZOPHRENIA

I am not so much concerned with the styles of psychotherapy as I am with aspects of the experience that may be less subject to fashionable variation. Among the principles of treatment are the following:

1. As the disorder itself is not meaningless and unrelated to human experience, it can be dealt with in ordinary terms.

2. Relational bonds will develop as the result of frequent meetings of patient and therapist, and these ties will be intensified if the meetings are accompanied by emotional arousal. The relationship can be useful or otherwise; the observable details of the involvement are what we know as technique.

3. The therapist need not be "perfect"; he will make mistakes and he will have exposed in himself a wide range of feelings. None of these—mistakes and feelings—can he deny; he must be aware of them and use them wisely, but he will rarely be certain as to the rightness of his acts.

4. The therapist should have or acquire certain abilities, among which are taking pleasure in the growth of another person; tolerance of attachment, dependency, and the inevitable stress of separation; the strength to set limits and yet permit another person to live in a way of his own; and the capacity to cooperate with members of a team, enduring the accompanying envy, jealousy, competition, anger, and affection. Finally, he should be able to accept the often slow pace of growth.

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Landlord-Supervised Cooperative Apartments: A New Modality for Community-Based Treatment

BY CHING-PIAO CHIEN, M.D., AND JONATHAN O. COLE, M.D.

A landlord-supervised cooperative apartment program—a new type of community residential treatment modality—was developed through the collaborative effort of a state mental hospital, the Massachusetts Department of Public Welfare, and citizens as landlords. The authors make a number of comparisons between this modality and more conventional facilities such as halfway houses, family care homes, nursing or rest homes, and independent apartments or rooming houses. They conclude that in a community such as the one described this modality appears to be financially and logistically superior to the others.

MANY HOSPITALIZED PSYCHOTIC PATIENTS can live and function in the community if a suitable sheltered environment is provided and appropriate aftercare plans are adopted. The conventional facilities used by psychiatric hospitals to meet the needs of such patients are halfway houses, family-care homes, nursing homes, and independent apartments or rooming houses.

All these facilities have limitations: therapeutic, financial, or both (see table 1). Halfway houses are arduous to establish and expensive to run and usually provide for only a few patients at a time. In Massachusetts, family-care homes are costly to the Department of Mental Health and provide a setting that sometimes promotes dependency on the foster parents. Nursing homes are often little better than chronic hospital wards and are therapeutically inappropriate for younger or better integrated patients involved in work or rehabilitation programs. Independent apartment living or rooming houses, even if they are subsidized by welfare or a charitable group, may be too big a step for many patients and can be difficult to launch because of the expense.

The Cooperative Apartment Program at Boston State Hospital is a collaborative effort on the part of state agencies and a concerned community to prevent indefinite institutionalization of the long-term mental patient. It grew out of an inpatient remotivation program for chronic patients and evolved into a useful and steadily expanding activity that has proved to have therapeutic, logistic, and fiscal advantages over more conventional programs.

In 1967 substantial progress was made in improving the psychiatric status and social competence of a growing group of chronically hospitalized patients at Boston State Hospital. Although it was felt that many of these patients were ready to live outside the hospital, the majority either were homeless or their families were unable to accept them. The one halfway house affiliated with the hospital viewed these patients as "too chronic," and all family-care placements were filled. But the patients were doing too well to be relegated to nursing homes.

In response to this problem one of us (C-P. C.), aided by a hospital staff member who owned a three-family home, approached the Massachusetts Department of Public Welfare. The staff member was willing to rent one unit in her home to ex-patients and provide them with supervision and help as they learned to function in the community. The chief mental health coordinator of the Welfare Department, intrigued with the idea, encouraged the local welfare office to provide a liaison worker to help plan and expedite the new arrangement. A rate was established ($20 a week a person for housing and supervision) that enabled the landlord to provide a comfortable furnished apartment for four to five patients.

DESCRIPTION OF THE PROGRAM

The Boston State Hospital Cooperative Apartment Program is unique in that it depends upon the joint efforts of the hospital, the Welfare Department, and citizens in the community. The area immediately surrounding Boston State Hospital is well provided with three-decker houses (buildings consisting of three one-floor apartments) and is a low- to middle-class area. Normally the patients live in one apartment in the house, the landlord lives in another, and the third is rented to someone else. A patient, like any citizen, can live in the apartment for as long as he wishes. Landlords owning these three-decker houses who are willing to house and supervise patients are recruited into the program through various means. The competence of the landlords who apply to be supervisors is evaluated by the psychiatric staff of the Cooperative Apartment Program, and a physical evaluation

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TABLE 1
Comparison Between Institution-Based and Community-Based Treatment Facilities for the Mentally Handicapped

Category	Mental Hospital	Nursing Home/ Rest Home	Conventional Halfway House	Boarding House/ Independent Apartment Group Living	Foster Family Care	Landlord-Supervised Cooperative Apartment
Establishment cost* to funding agency	More than $1,000,000	More than $100,000	$40,000–80,000	Less than $1,000 (furniture)	—	—
Annual maintenance cost* per patient	$ 10,307	$ 6,195	$ 3,000–4,000	$2,000–3,000	$2,500	$2,183
Annual savings per patient compared with patient cost in state mental hospital	—	$ 4,112	$ 7,307–6,307	$8,307–7,307	$7,807	$8,124
Status of occupant	Patient	Patient	Resident	Resident	Resident or patient	Resident
Availability of supervisor	Yes	Yes	Yes	Usually not (high recidivism)	Yes	Yes
Promotion of dependency	Yes	Yes	No	No	Yes	No
Limited length of stay	Yes/No	No	Yes	No	No	No
Citizen participation in daily care	No	No	Yes	No	Yes	Yes
Reintegration into community	No	No	Yes	Yes	Yes	Yes

*Costs are approximate, based on Massachusetts figures for 1972.

of the apartment is made by the City of Boston Housing Inspection Department. Applicants should demonstrate their active concern for the rehabilitation of the patients and be free to meet the many demands of time and energy involved in daily supervision.

Under the care and supervision of the landlord-supervisor, the patients are responsible for such routine chores as cooking, housekeeping, shopping, and laundry. The apartments vary somewhat in the degree of autonomy assumed by the tenants. However, the general practice is for the landlord to be actively supportive in the beginning by providing meals and assistance to the tenants but to work gradually toward having them care entirely for themselves. If the tenants want to have the landlord cook for them because of their work schedule or for other cogent reasons, the rent is increased to include the cost of meals. Patients who are without financial resources upon their release from the hospital are supported by the Welfare Department through the Disability Assistance category. The patient receives the check in his own name and is expected to handle his own budget. Most patients pay $80 a month to the landlord-supervisor for room and care.

Most of the men and women considered for the program are long-term patients who are capable of maintaining responsibility for at least a minimum of personal care, regardless of whether or not they have psychotic symptoms. Once they have moved into an apartment, their supervision is carried out by both the landlord and the Cooperative Apartment Team, which consists of a psychiatrist, a social worker (from the local welfare office), an occupational therapist, and a nurse. All apartments are visited at least once a week by the team to discuss any problems, and staff members are available by telephone to both tenants and landlords around the clock. In addition to the supervision provided by the Cooperative Apartment Team, the hospital unit that referred the patient to the program retains responsibility for treatment so that continuity of care is assured.

All of the tenants in the cooperative apartments are expected to engage in daytime activity programs consistent with their functional level, either at work or in the day-care program at the hospital. Currently, 16 percent of the patients are employed in community industry and 55 percent in the sheltered workshop program at the hospital. Most of the remaining 29 percent, either because of age or low functional capacity, attend day-care programs at the community lounge located on the hospital grounds. A few tenants remain in their apartments doing housekeeping and other small jobs.

Medication

For many of the patients who need to be maintained on medication a long-acting phenothiazine (fluphenazine enanthate) is used; it is inexpensive and reliable. The patient is expected to come to the hospital treatment room to receive his injection on a scheduled date. If he does not show up within 48 hours, the staff nurse goes to his apartment to administer the medication. Although emphasis has been placed on the need for maintenance medication, efforts are also being made to help the tenants phase out their drug use.

Two research projects to study refinement of the maintenance use of depot phenothiazines are being carried

TABLE 2
Evaluation of the Program by Patients

Questionnaire Statements	Yes N	Yes %	No N	No %	Uncertain N	Uncertain %
1. Life in the apartment is better than life in the hospital.	54	93.1	3	5.1	1	1.8
2. I have been helped by living in the cooperative apartment.	54	93.1	1	1.8	3	5.1
3. I would like to stay in the cooperative apartment.	53	91.4	2	3.5	3	5.1
4. I would like to continue living in the cooperative apartment rather than return to the mental hospital.	52	89.7	3	5.1	3	5.1
5. Since I moved from the hospital to the apartment I feel more like a human being.	54	93.1	3	5.1	1	1.8
6. I would like to see more patients move into cooperative apartments rather than stay in the mental hospital.	48	82.7	3	5.1	7	12.2

out (1, 2). One study (1) has clearly demonstrated that the common practice of using antiparkinsonian medication prophylactically is unwarranted. Even though the incidence of extrapyramidal symptoms in this study was relatively high, the symptoms could be controlled by antiparkinsonian medication as needed. The other study is exploring the feasibility of intermittent drug therapy at a rate determined by the patient's own judgment. This is extremely important in light of the severe side effects frequently reported with long-term maintenance drug treatment. During long-term fluphenazine enanthate treatment, one of us (C-P.C.) noticed a sensory type of akathisia in a few patients. This has been described by the European school as "cenesthopathia" (3)—"a general feeling of being ill." It can be managed by the doctor's reassuring the patient, by reducing the dosage, and by antiparkinsonian medication. Too often fluphenazine enanthate is discontinued because of cenesthopathia, which often makes the patient feel panicky, as well as a misconception on the part of the physician that the patient is relapsing.

CURRENT STATUS OF THE PROGRAM

From the modest beginning in December 1967, a total of 35 apartments have been established by the team. Over this four-year period, 12 of the apartments have been closed: seven due to landlords' personal reasons and five because of substandard supervision. Despite the closing of a few apartments every year, the total number of apartments available for ex-patients has been steadily increasing. At the present time, 23 apartments are available to 101 ex-patients.

As of May 1972, a total of 186 homeless patients, mostly chronic schizophrenics, have been placed in the cooperative apartments. Thirty-three out of these 186 patients (18 percent) have been returned to the hospital because of an exacerbation of symptoms or drinking problems. This suggests that more than 80 percent of such homeless patients who because of lack of income or social resources might otherwise have been continuously confined in the institution could be successfully placed in the community. About 90 percent of the patients accommodated in the cooperative apartments were receiving welfare assistance at the time of placement. Currently the cooperative apartments are also open to younger and more acute patients from the mental health centers covering the Boston State Hospital catchment area. Twenty-eight such patients have been placed since July 1, 1971. Five patients have been accepted into this program as "halfway-in" patients from the outpatient clinic; the purpose was to avoid unnecessary hospital admission.

IMPACT ON THE COMMUNITY

The Cooperative Apartment Team has maintained a good working arrangement with the landlords, and problems are usually ironed out quickly. As a result, landlords tell their friends and neighbors about the program and new landlords are recruited quite easily. Obviously a financial incentive exists. With four patients residing in an apartment, a landlord's income from this source ranges from $320 to $400 a month. The resistance often encountered by halfway houses when they try to move into a new neighborhood has never been an issue in this program. In fact, once the neighbors see how well former mental hospital patients adapt to the community, they are usually more than willing to give their assistance and often try to find out about the program for themselves. The close supervision given the patients by the team and the landlord's everyday participation in the program bring some assurance to the landlord that rent will be collected regularly, that there is a continuity of tenants, and that their property will be maintained.

Barrett and associates (4) reported that the community tenure of chronic patients following emergency discharge was more strongly related to the characteristics of the caretaker than to the psychopathology of the patients. Families that were financially disadvantaged often kept patients on as useful helpers in their homes. A similar situation has been observed in our Cooperative Apartment Program. The landlords in this program are usually hard workers, often engaged in more than one full-time job. It is the wife of the landlord who actually cares for the patients. Helping the patient to relearn community skills and daily household chores on the landlord's own premises is both rehabilitative for the patient and practical for the landlord. Thus this program attracts landlords who often have difficulty with regular tenants who are sometimes delinquent in their responsibilities.

The area surrounding Boston State Hospital, where almost all the apartments are located, is caught up in the urban crisis described in Banfield's *The Unheavenly City* (5). Community residents are often unaware of the help they can receive from public agencies; conversely,

public agencies sometimes are too overloaded to actively approach community residents. A program such as the Cooperative Apartment Program brings these two segments of society together to the benefit of each. Because the psychiatrist, nurse, and social worker make weekly visits to all the apartments, the landlords in particular and the community in general see them as people who want to help them rather than as uncaring professionals hidden away in far-off offices. This provides community members with easier accessibility to help from these professionals when they need it. Aside from the team, workers from various other human service agencies are brought in to aid in rehabilitating the patients living in the cooperative apartments. This indirectly results in a strengthening of the rehabilitation of the core city itself.

AN ATTEMPT AT EVALUATION

As described by Mechanic (6), the effects of a new mental health program such as the Cooperative Apartment Program can be evaluated in at least three ways:

1. What is the subjective response of patients to the program? Do they feel they have been helped, have fewer symptoms, and are more able to cope?
2. What is the objective evaluation of the patients' performance and the quality of their lives after exposure to the program?
3. Does the program lead to an equivalent or better outcome at less cost than other programs?

In order to answer the first question, patients who have lived in an apartment for three months or longer were asked to complete a questionnaire covering six areas of concern. Table 2 shows the results. From 82.7 percent to 91.3 percent of the patients endorsed the program with enthusiasm, while approximately five percent of them had negative responses.

To answer the second question, an objective evaluation by the landlord-supervisors was carried out by means of a seven-point global rating scale ranging from "very much worse" (score = 1) to "very much improved" (score = 7). The landlords were asked to evaluate a patient's current behavior compared with his behavior when he first moved into the apartment. The results showed that all the tenants were considered "much improved" to "very much improved" in five areas important to community living: mental condition (average score of 6.34); housekeeping skills (6.33); personal hygiene and good grooming (6.41); personal relationships (6.37); and adjustment to community life (6.41).

Regarding the third question, the cost of the Cooperative Apartment Program is the lowest among a number of programs, as shown in table 1. The annual cost per patient of $2,183 is composed of $1,788 from the Massachusetts Department of Public Welfare Disability Assistance category and $395 attributable to the state hospital staff and space costs. Seventy-five percent of the Massachusetts Disability Assistance cost is reimbursed to the state from federal resources; therefore the actual cost to the Commonwealth of Massachusetts is $447 plus $395, or $842 for each patient per year.

CONCLUSIONS

The Cooperative Apartment Program, a new type of community residential program, is a hybrid of foster family care and independent apartment living. With supervision provided by the landlord living in the same building but on a separate floor, the patient can enjoy a family atmosphere yet maintain some privacy and independence. Because of the landlord's participation in this program the resistance of neighbors, often observed in the establishment of halfway houses, can be eliminated. The availability of cooperative apartments makes the life of homeless mental patients more natural and gives them a chance to adapt to community life while they are still under supervision. The developmental potential of this program—financially, socially, and administratively—is much greater than that of traditional halfway houses. Evaluation of the program revealed a remarkably high degree of satisfaction on the part of both the clients (patients) and caretakers (landlord-supervisors and hospital staff). The costs were about a fifth of the amount required for hospital-based treatment.

Rehabilitation of the ex-mental patient within the core city helps to improve the urban situation by bringing concerned and knowledgeable professionals into the community. The expansion of this program will undoubtedly help to shift the traditional health delivery system for the mentally handicapped from the back wards of institutions to a more humanity-oriented community basis.

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Screen Memories in a Pair of Monozygotic Twins Discordant for Involutional Depression and Psychophysiological Disorders

BY LORETTA R. LOEB, M.D., STANLEY PEAL, M.D., FELIX F. LOEB, JR., M.D., AND BRYCE TEMPLETON, M.D.

The authors studied a pair of monozygotic twins who became discordant for mental and physical disorders late in life. Differences in the twins' early histories, earliest memories, and reactions to the loss of their mother when they were children suggest that their early interactions with their environment resulted in different modes of adaptation, which subsequently became internalized as different defensive and characterological patterns. The authors believe that the specific environmentally determined psychodynamic influences described in the paper serve to explain the twins' discordance for disease.

IN 1876 GALTON (1) INTRODUCED the method of comparing the life histories of monozygotic and dizygotic twins to study the hereditary determinants of disease and concluded that "nature prevails enormously over nurture." When others began to use more refined methods to study twins, Galton's conclusion was confirmed, and the single twin-pair study method has contributed greatly to our knowledge of the interrelationship between heredity and environmental factors in the etiology of both physical and mental illnesses. George Ham (2) said that the modern dimension of investigation of genetic dynamics and psychodynamics as interacting and mutually dependent factors will become an outstanding factor in our search for truth in the field of human behavior and psychiatric illnesses.

Our paper is an effort in this direction. We describe a pair of identical twins who are discordant for involutional psychotic depression, diabetes mellitus, and coronary insufficiency. At the age of 59 the older twin, A., developed an involutional psychotic depression and diabetes mellitus. At the age of 60 the younger twin, B., developed a coronary insufficiency. B. never developed an involutional psychotic depression or diabetes mellitus, and A. never developed coronary insufficiency. Differences in the twins' birth weight and earliest memories suggest a nongenetic explanation for these discordances.

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

The authors have all been with the University of Pittsburgh School of Medicine, Western Psychiatric Institute and Clinic, Pittsburgh, Pa., where Dr. Loretta Loeb was Assistant Professor of Psychiatry, Dr. Peal is Assistant Professor of Psychiatry, and Dr. Felix Loeb was Clinical Associate Professor of Psychiatry. The Drs. Loeb are now in private practice at 1250 Prospect St., #C-25, La Jolla, Calif. 92037. Dr. Templeton is now on the staff of the National Board of Medical Examiners, Philadelphia, Pa.

The authors wish to thank Richard Iammarino, M.D., for his help in analyzing and interpreting the red blood cell antigen data, and Larry V. Pacoe, Ph.D., for his assistance with the psychological testing.

METHOD

The monozygosity of our twins was established by the fact that they had identical blood types including the rare R_2R_2 factor (Weiner) and similar lipoprotein electrophoretic patterns and were identical in appearance, voice, nailbed structure, and tooth conformation (3). The clinical evaluation of each twin included a history, a physical examination, a review of hospital records, a videotaped psychiatric interview, and psychological tests. The psychological tests performed included the Rorschach, the Human Figure Drawing, and the Minnesota Multiphasic Personality Inventory.

RESULTS

Significant Family Medical History

The twins' father and three brothers died of heart attacks. The father and one brother were alcoholic. A second brother had been hospitalized for involutional psychotic depression. A third brother suffered from diabetes mellitus.

Early History of the Twins

The early history of the twins was obtained largely from an older brother, C. The twins were the fourth and fifth of eight sons born to first-generation immigrants. A. was born first and was slightly heavier. B., unlike his twin, was a "little devil," and was very attached to their mother.

When the twins were seven, their mother died from peritonitis seven days after childbirth. She was described as a "lady" who was outgoing and aggressive and who had many friends. She was "stern, but interested in her family." The father, a business manager, was also described as strict, particularly with regard to sex. When

the father became angry, he would withdraw and, after the mother's death, he began to drink heavily. The family lived frugally and the twins considered themselves poor. There was little overt fighting among the siblings. A. felt his twin was intellectually quicker and more apt in school, while B. felt A. more often came up with commonsense solutions to practical problems. Twin A. failed a grade in school and was to be separated from his brother, but A. manipulated the teacher by crying and was promoted along with B. Twin A. was described as the hardest worker in the family.

When the twins were 17, because of their father's excessive drinking they had to leave school to earn a living. A. left first to work as a semiskilled laborer, and he remained in this same job for 34 years. When B. left school he also obtained a blue-collar job but at age 30, during a change of management, he was promoted to a managerial job, which he retained until his death.

Earliest Memories

A.'s earliest memory was of his mother putting him to bed. He also recalled that, at about age seven, he was pushed back into the family's yard to make room for the ambulance that took his mother to the hospital, where she died. There was no affect associated with these memories.

B. had no memories of his mother. His earliest memory was of intervening to protect his twin, who was being chased by some black children. He ran home, got an unloaded rifle, and threatened his brother's adversaries.

A.'s Adult History

A. married at 24 and left the family home. He did not participate in many activities with his wife and avoided arguments with her by quietly walking away. He was devoted to his daily work and to a second, weekend job. A. and B. took lay responsibilities in the same church, but they both left the church after A. was accused of stealing church funds. B. immediately joined and became active in another church. A. stayed away from all church activities for eight years and then joined B.'s new church. A. never again took on church responsibilities.

At the age of 59, two months prior to his admission to Western Psychiatric Institute and Clinic, A. suffered two psychological losses. His wife insisted on moving to a new home, and his daughter moved away from home. He then developed anorexia, impotence, sweating, body tremors, and "butterflies" in his stomach. He was hospitalized and was found to have glycosuria and an abnormal reaction to the glucose tolerance test. Roentgenograms revealed some calcification and tortuosity of his aorta and degenerative spinal osteoarthritic changes. He was discharged with a diagnosis of anxiety reaction and diabetes mellitus. A month later he was rehospitalized for abdominal cramps. He appeared depressed, became belligerent, refused to get out of bed, and said he wanted to be put out of his misery. When A. verbalized delusions about a "fire" and a "devil" in his stomach, he was transferred to Western Psychiatric Institute and Clinic.

During this hospital stay he was demanding, withholding, and overly polite. He was distant from his therapist and refused to discuss any psychological problems. His chronic constipation developed into a fecal impaction. Following its removal by his therapist, the patient's behavior toward her changed dramatically. He immediately kissed her hand and stopped withholding by freely talking about his problems. He entered into a positive therapeutic relationship with his therapist. He gradually recovered and was discharged two months later with the diagnosis of involutional psychotic depression in an obsessive-compulsive personality. He was subsequently treated as an outpatient for three years.

B.'s Adult Life

B. married at age 22 and had a close relationship with his wife and children. He became actively involved in the community and the Boy Scouts. B. had a history of fainting episodes, the first of which occurred in church. Unlike twin A., psychological losses in B.'s life were not accompanied by depression. When he was 50, one of his sons was accidentally killed. Grief-stricken, he lost his voice while ordering flowers for the funeral. When the family's summer home was sold, he began to drink heavily for a short time. That same year, when his oldest son developed marital difficulties, he took his daughter-in-law's side and effectively resolved the conflict. At age 54 he was rewarded for his industriousness at work with an unexpected promotion and a salary increase. He then began to gain weight and, for the first time, became heavier than A. When he was 58 his wife was mistakenly suspected to have cancer. He told no one about this and, following her recovery, he had difficulty recalling her hospitalization.

When he was 60, while putting snow chains on his car tires, B. became cold and clammy and felt pain in his chest, back, and abdomen. When he was examined by his doctor, his blood pressure was 98/58 (it had been 160/100 a month earlier). He was admitted to a hospital. Roentgenograms suggested either a dissecting aneurysm or a dilatation and tortuosity of the aorta. Electrocardiograms indicated coronary insufficiency, but no coronary infarction. Serial electrocardiograms showed gradual but distinct improvement. He was discharged with the diagnosis of coronary insufficiency. Six months later he had an episode of syncope. An electrocardiogram revealed no significant changes. B. was convinced this episode was due to his having drunk wine at dinner and thereafter he avoided drinking wine. Nevertheless, he continued to have blackouts of increasing duration. After one of these he was readmitted to the hospital. An electrocardiogram suggested either coronary insufficiency or myocardial fibrosis with a bundle-branch block. Angiograms revealed an aneurysm of the aortic arch that had dissected to the fourth thoracic vertebra. The patient refused surgery and was discharged. He died three weeks later. Permission for a postmortem examination was not obtained.

In spite of B.'s success in life, he always remained submissive to his less successful twin and had less status in their family.

CLINICAL OBSERVATIONAL DATA

The interactions of the twins during an interview in which both were present, along with two of the authors, illustrate some of the psychodynamics. Whenever A. hesitated or had difficulty responding, B. protectively answered for him. Thus in a potentially threatening situation A. was characteristically helpless (as he was in his earliest memory), whereas B. was characteristically protective of A. (as in B.'s earliest memory). This protectiveness arose not only as an overcompensation for his own anxious, inadequate feelings but also as a reaction formation against B.'s own rivalrous anger toward A.

PSYCHOLOGICAL TEST RESULTS

The results of the psychological tests were consistent with our clinical findings. The twins differed mainly in that A. was more constricted than B. in the degree of his ideational and affective activity. A.'s tight, compulsive defenses limited his potential so that his thinking was stereotyped and he was less reactive than his twin emotionally. B. in contrast was more imaginative and striving. Although A. was ingratiating, self-critical, and depressed, he had little conscious anxiety. B. could think more abstractly and could have longer-term goals and livelier, more enjoyable interactions with the world, but he had more conscious anxiety and conflict.

DISCUSSION

Shields (4), in attempting to analyze the relative importance of genetic and environmental determinants of mental illness in twins raised together and apart, discovered that in individual cases a systematic analysis of the histories showed a relationship between early environment and later findings. The methodological critique of this issue by Rosenthal and Kety (5), although stated in regard to research in schizophrenia, is also applicable to our twin study. Rosenthal stated:

> I think that Dr. Erlenmeyer-Kimling came closest to formulating the issue in a way that is compatible with current knowledge and conducive to developing productive research in the future. She says: "The question to be asked is not: 'What are the relative contributions of heredity and environment' but rather 'What kinds of environmental input trigger manifestations of the disorder in genotypically vulnerable persons, and why are these important, in a psychophysiological sense?' " I myself would have phrased the same point in this way: How do the implicated hereditary and environmental variables interact or coact to make for various kinds of . . . outcomes? The level at which the analysis of interaction would be conducted, i.e., physiological, psychological, or psychophysiological, would be left to the individual investigators, but all such analyses could be informative (5, p. 417).

Our identical twins illustrate the complex interweaving of environmental and genetic factors. Although they were raised in the same environment, they were different in personality and manner of expressing feelings and they displayed a discordance for involutional psychotic depression. Kallmann (6) found that the concordance rate for involutional psychotic depression was 60.9 percent in monozygotic twins and 6.0 percent in dizygotic twins. This shows that although involutional psychotic depression has high hereditability, environmental components are also important in its pathogenesis. Our case suggests some of the environmental factors involved.

Kallmann's studies (6) of manic-depressive and involutional psychoses and Slater's findings (7) with a mixed group of depressives have shown the importance of genetic factors in the etiology of these disorders. Among patients with various neuroses, obsessive patients showed more evidence of genetic predisposition than did hysterical patients (8).

The difference in the twins' birth weights may have influenced the early relationships of the twins within the family. The thinner twin, B., was probably felt to need more food and was given more oral stimulation by his mother. Their busy mother may have felt A. needed less, and she may have given him less gratification.

A.'s two early memories were of being left and rejected by his mother. He was pushed out of the way by the ambulance that took his mother from him, and he was put to sleep by his mother, who thereby left him. A.'s use of isolation of affect as a typical defense is apparent in these early memories, which reflect his apathy and passivity.

B. began using his typical defense—repression—early, in that he had no memory of his mother. His earliest memory was of protecting his brother from injury. This memory may have reduced B.'s guilt for having received more from his mother than did A. Twin B., who got more from his mother, was able to make a positive identification with her and, like her, he became outgoing, aggressive, and phallic. A., who received less and who experienced rejection, became more self-depreciatory, passive, and anal. These early memories support our speculation that birth-weight differences influenced their relationship with, and identification with, their mother.[1]

As a consequence of their different interactions with their mother, the twins developed different modes of defense and different typical reactions to childhood and adult experiences. These differences were prominently shown by the way the twins handled object loss. B. repressed, somatized, and allayed his anxieties with hysterical symptoms, while A. isolated his affect from his ideas and allayed his anxieties by working compulsively or by becoming depressed. In spite of B.'s having been closer to their mother, he had total amnesia for her. Subsequently, B. had amnesia whenever he was confronted with a loss. A. kept busy in order to avoid getting too close to or too involved with people; he felt that if one doesn't have an object, one can't lose it. When A. became

[1] Freud stated that earliest memories are similar to other screen memories or dreams (9). Their manifest content represents the central dynamics of mental and psychosomatic disorders (10, 11).

older, this obsessional defense of isolation failed; when faced with loss, he turned his resultant anger against himself (became depressed). He then clung to his lost object in a circular, ruminatory fantasy or delusion.

Our clinical impressions of the twins were supported by the psychological test data. These studies indicated that twin B. suffered from an anxiety neurosis and from possible hysterical conversion reactions, while twin A. suffered from an obsessive-compulsive neurosis and from depression. Twin A. showed more profound ego constriction than did twin B.

It is known that the compulsive personality is strongly predisposed to involutional psychosis (80 percent of Kielholz' cases [12]). Since one of our twins had a compulsive personality and the other did not, we have evidence to support the notion that the environmental factors that influence the development of an individual's compulsive character traits also predispose him to his later development of an involutional psychotic reaction.

Burlingham (13) pointed out the importance of the interaction of constitutional and maternal influences in determining differences in twins. Hartmann (14), in a review of his earlier study of ten pairs of twins, stated that "differences in orderliness, stubbornness, and stinginess were especially pronounced and most frequently demonstrable." Steinfeld was quoted by Orr (15, p. 287) as stating that "the tendency is for the twins to develop a severe compulsion or anxiety neurosis." These contrasts were also found in the character traits and diagnoses of our twins.

Other studies (15, 16) suggest that the differences in the character traits and diagnoses of our twins might be due to the different ways in which they handled the aggression stemming from their sibling rivalry. In our twins, B. became an aggressive "little devil" who had outbursts of temper, while A. conformed. B.'s guilt for having actively surpassed A. in their competition, first for their mother's attention and later in other spheres, is highlighted both by B.'s earliest memory of protecting his brother and by his assuming an inhibited, submissive attitude whenever he was with A. (16). Bacon (17) found such compliance and defiance in the anginal patients she analyzed.

A. and B. also differed from each other in their physical health. Although both had generalized arteriosclerosis and asymptomatic hypertension, only twin B. had the signs and symptoms of coronary insufficiency and aortic aneurysm. Twin A. had diabetes mellitus, while B. did not have even a latent tendency to develop diabetes mellitus, as far as could be established by laboratory studies.

Many authors have pointed out that patients with coronary disease are subjectively anxious and objectively tense (18, 19); diabetics, by contrast, are apt to be passive or depressive (20, 21). Our data support these correlations.

Hinkle and associates (22) postulated that when diabetics suffer losses, they handle carbohydrates as a starving person would. The losses A. anticipated when he was 59 reactivated the repressed feelings he had experienced as a child when he suffered oral deprivation and when he lost his mother. Could it be that when his psychological defense mechanisms were no longer able to effectively handle his overwhelming oral needs, his body somehow was no longer able to handle his carbohydrate metabolism? Since the twins had identical genetic structures, it is supportive of Hinkle and associates' hypothesis that the disease presented itself only in the more orally deprived twin.

The organic and hereditary bases of myocardial infarction have received a great deal of attention and there has been increasing consideration given to psychological stress and strain factors (23). Studies have been made of focal conflicts (17), character defenses (24), and early life relationships that point to various levels of development, including the age at onset of the infarction (25).

Repression and identification (26, 27) are the important defenses used by myocardial infarction patients to deal with their aggressive impulses. In spite of using these defenses, however, these patients still suffer from a great deal of anxiety. In order to handle this residual anxiety they use other defenses: displacement, avoidance, identification with the aggressor, and overcompensation (18, 24, 27).

The importance of anxiety in B. is also shown in the studies of syncope by Romano and Engel (28). They point out that vasopressor syncope is due to the anxiety of inhibited flight.

B. is also like Kemple's patients (29), who had difficulty expressing feelings and who developed vascular disease. B.'s amnesia for his mother, his early memory of protecting his brother, and his adult use of avoidance and hysterical somatization when under stress all point to his difficulty in handling aggressive feelings.

Twin A., who isolated his feelings, had general arteriosclerosis and diabetes mellitus but did not develop symptomatic cardiovascular disease. On the other hand, twin B., who, in spite of his use of repression and avoidance as defenses, was often consciously anxious, did develop cardiovascular symptoms. Some researchers (26, 27) have demonstrated this use of avoidance and repression in the patients they found to be prone to coronary disease.

CONCLUSIONS

We have studied a pair of monozygotic twins who, late in life, became discordant for mental and physical disorders. Differences in the twins' birth weights, early histories, earliest memories, and reactions to the loss of their mother when they were seven years old suggest that in their early interaction with their environment they developed different modes of adaptation, which subsequently became internalized as different defensive and characterological patterns. Twin A. isolated his feelings, while twin B. used avoidance defenses and repression. Thus the older twin, A., became an obsessional character, while the younger twin, B., came to suffer from an anx-

iety neurosis in a hysterical character. As is consistent with the findings of others, the twin with the obsessional character, who used isolation as a defense, developed diabetes mellitus and involutional depression, whereas the twin with the hysterical character, who suffered from anxiety and used repression as a defense, developed coronary insufficiency and an aortic aneurysm.

Thus in these monozygotic twins, both of whom were equally genetically predisposed to diseases, we have documented some of the specific environmentally determined psychodynamic influences that may have made them discordant. Confirmatory studies are needed.

Our investigation confirms the value both of the single twin-pair study and of the use of earliest memories in clinical investigation. There is a need for further studies of discordances in individual pairs of twins who suffer from diseases that are partially genetically determined.

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Answers to Questions of the Month

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Levoamphetamine and Dextroamphetamine: Differential Effect on Aggression and Hyperkinesis in Children and Dogs

BY L. EUGENE ARNOLD, M.D., VLADIMIR KIRILCUK, M.D., PH.D., SAMUEL A. CORSON, PH.D., AND ELIZABETH O'L. CORSON, M.S.

In laboratory experiments with hyperkinetic, untrainable dogs and in a comparison of levoamphetamine, dextroamphetamine, and placebo in children, levoamphetamine and dextroamphetamine were found to be approximately equal in calming an aggressive, hostile dog and in benefiting "unsocialized-aggressive" children; dextroamphetamine was more effective than levoamphetamine in calming "nervousness" and hyperactivity in dogs and in overanxious-hyperkinetic children. These data suggest that in the hyperkinetic syndrome, aggression and hostility may be benefited equally by levoamphetamine or dextroamphetamine via a dopaminergic mechanism, while anxiety and overactivity may be benefited significantly only by the dextro isomer via a norepinephrinergic mechanism.

THE PLIGHT OF children with behavior and learning problems that often respond to stimulants by "paradoxical" calming has become well known under such names as "hyperkinetic syndrome," "minimal brain dysfunction," and "minimal brain damage." These and other grammatically singular appellations are bandied as if we believed these problems represented a single, homogeneous clinical entity (like pneumococcal pneumonia) that would uniformly respond to a prescribed treatment, if only we could find the treatment. However, those familiar with the syndrome readily admit its diversity of clinical pictures, probable diversity of etiology and pathogenesis, and even diversity of response to the highly touted stimulant therapy.

At least two authors have recently attempted to clean up this diagnostic cesspool. Fish (1) has proposed criteria by which children who may respond favorably to stimulants could be assigned to one of three diagnostic categories: 308.0—hyperkinetic reaction (with immaturity, inadequacy, lability, and poor organization); 308.2—overanxious reaction ("nervousness" and possible overactivity with subjective distress, otherwise well-organized behavior); and 308.4—unsocialized-aggressive reaction (aggressiveness and hostility with denial of feelings and personal responsibility, otherwise well-patterned behavior). These categories are reminiscent of Wender's "classical hyperactive," "neurotic," and "sociopathic" subsyndromes (2).

One of the puzzling things about the hyperkinetic syndrome that raises serious questions about its being a homogeneous diagnostic entity is the individual variation in response to stimulants. It has long been known (3, 4) that sometimes dextroamphetamine helps a hyperkinetic child more than the racemic (dl) mixture does, and sometimes vice versa. In addition, some children are helped by methylphenidate (Ritalin) but not by amphetamine, and vice versa. Furthermore, while the majority of such children are helped by stimulants, a small percentage are actually made worse. The uncertainty concerning the practical clinical use of drugs for these children is underscored by recent attempts to introduce some prognostic guidelines. Barcai (5) has proposed a finger twitch test. Yoss and Moyer (6) have found that 25 percent of hyperkinetic and underachieving children have a narcoleptic-like electronic pupillogram that changes favorably with behavioral improvement on amphetamine. Knopp and associates (7) have found a correlation of approximately 0.6 ($p<.01$) between behavioral response to dextroamphetamine and changes in the extent of pupillary light reaction before and one-half hour after a test dose.

The question naturally arises whether the differential drug effects may be correlated with the different diagnostic categories proposed by Fish (1) and Wender (2). Clinical pharmacological separation of the aggressive and "nervous" components of the hyperkinetic syndrome seems to be supported by data from pilot psychopharmacologic experiments with hyperkinetic, untrainable dogs in the Laboratory of Cerebrovisceral Physiology of the Department of Psychiatry, Ohio State University in Columbus.

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The dog studies were supported in part by Public Health Service grants MH-12089 and MH-18098 from the National Institute of Mental Health and by Ohio State University College of Medicine.

The authors wish to thank Marcia Norman and James Scheib for their assistance in collating data and Donald Smeltzer, M.A., for his statistical consultation.

TABLE 1
Comparison of Significant Differences Between Treatments with Dextroamphetamine, Levoamphetamine, and Placebo

Category	Dextroamphetamine vs. Placebo	Levoamphetamine vs. Placebo	Dextroamphetamine vs. Levoamphetamine
Psychiatrists' ratings			
Unsocialized-aggressive group	p<.0001	p<.005	n.s.
Overanxious-hyperkinetic group	p<.03	n.s.	p<.005
Teachers' ratings			
Unsocialized-aggressive group	p<.05	p<.05	n.s.
Overanxious-hyperkinetic group	p<.05	n.s.	p<.05
Parents' ratings			
Unsocialized-aggressive group	p<.02	p<.02	n.s.
Overanxious-hyperkinetic group	n.s.	n.s.	n.s.

DOG EXPERIMENTS

Method and Results

The four hyperkinetic, untrainable dogs used in this pilot study were previously reported on by Corson and associates (8,9). Most of the dogs were merely hyperkinetic, not particularly vicious. One of them, however, a cocker-beagle, was both hyperkinetic and aggressively hostile, providing a neat animal model for the constellation of symptoms seen in some aggressive hyperkinetic children.

While aggressive behavior could be easily observed, even in the dog's home cage or kennel, the hyperkinetic traits could be best observed when a dog was placed on a Pavlovian stand, mildly restrained, and left alone in a soundproof chamber, as described by the Corsons elsewhere (10). Therefore, experiments were conducted in both settings.

In cage experiments the aggressive hyperkinetic dog was given either l- or d-amphetamine (10 mg. orally) on different occasions. Each time, amphetamines had a very pronounced effect: By approximately one hour the ordinarily vicious dog completely lost his aggressiveness. It was possible to take him out of the cage, walk him, pet him, and feed him a treat without danger of the experimenter's being bitten.

Although both isomers were equally effective in suppressing aggression, the duration of effect was different: While d-amphetamine kept the dog quiet seven hours after administration, l-amphetamine lasted only about half as long.

On the Pavlovian stand, "normal" dogs, after a few unsuccessful tries to escape, eventually give up fighting and tolerate the restraints. By contrast, "hyperkinetic" dogs immediately start thrashing, chewing equipment within reach, and trying to free themselves. This behavior would go on for indefinite numbers of experiments; they simply would not adapt to the experimental situation.

Pavlovian-stand experiments in which both isomers were used were carried out on four hyperkinetic dogs, including the vicious one. The dosages varied from 2.5 to 40 mg. (.25 to 4.0 mg./kg.). For each dog, elimination of all signs of hyperkinetic behavior required three to four times as much levoamphetamine as dextroamphetamine. The vicious dog, for example, required 40 mg. of levoamphetamine to eliminate hyperkinesis as effectively as 10 mg. of dextroamphetamine did, even though his aggression and hostility were eliminated by 10 mg. of either isomer.

This differential effect on hyperactivity paralleled the differential effect on appetite. The three dogs who showed anorexia did so with 1.0 mg./kg. of dextroamphetamine but required about three times that amount of levoamphetamine to produce anorexia. Unfortunately, dextroamphetamine had been tried before levoamphetamine in these exploratory experiments, so that tolerance cannot be ruled out as a source of the apparent difference in anorexogenic potency.

Conclusions

Thus, from pilot animal experiments in standardized laboratory settings, we have data suggesting that in hyperkinetic organisms: 1) levoamphetamine has a shorter duration of action than dextroamphetamine; 2) during the duration of maximal effect, levoamphetamine and dextroamphetamine seem to be approximately equal in their aggression-taming potency, but dextroamphetamine is three to four times as potent in calming "nervousness" and in producing anorexic effects; and 3) therefore, the beneficial effects of amphetamine on aggression and "nervousness" may operate through different biochemical mechanisms.

CHILDREN

Method and Design

Encouraged by these findings in laboratory dogs, we returned to the raw data of a previously reported nine-week double-blind crossover comparison of levoamphetamine, dextroamphetamine, and placebo (11) that demonstrated the efficacy of levoamphetamine in hyperkinetic children. This study had only 11 subjects, but it offered reliable, quantitative, independent ratings by psychiatrists, teachers, and parents. Without being consciously aware of how each child fared comparatively on the dextroamphetamine and levoamphetamine ratings,

we assigned each of the children to one of the three diagnostic categories advocated by Fish (1). This resulted in five diagnoses of unsocialized-aggressive reaction (308.4), four diagnoses of overanxious reaction (308.2), and two diagnoses of hyperkinetic reaction (308.0).[1]

Because these last two groups were so small and because we were mainly interested in aggression as opposed to other manifestations of minimal brain dysfunction, we lumped those with overanxious reaction and those with hyperkinetic reaction together as the "overanxious-hyperkinetic" group for statistical comparisons on the three sets of ratings.

Results

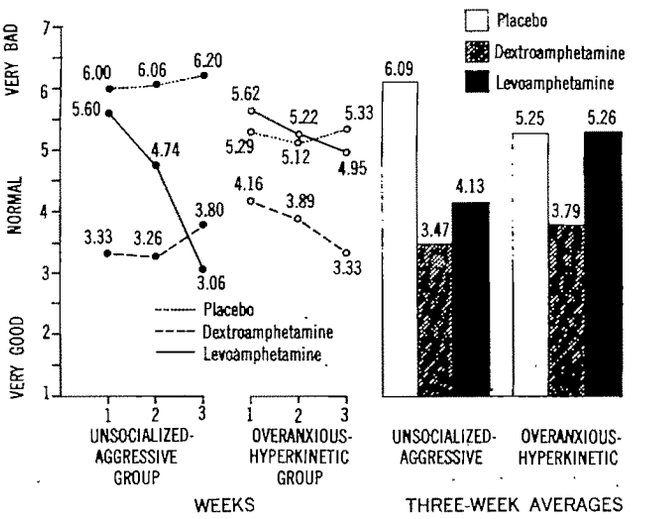
Figure 1 shows the psychiatrists' ratings for the two groups; they are mainly based on weekly parental quantification of target symptoms. The three independent raters had an overall interrater reliability coefficient of 0.7734. Note that for the unsocialized-aggressive group levoamphetamine was rated as being almost as good as dextroamphetamine (difference not significant), and both of these active drugs were significantly better than placebo. In contrast, for the overanxious-hyperkinetic group the levoamphetamine was no better than placebo, even though dextroamphetamine was significantly better (see table 1).

The same pattern emerged when the two groups were compared on the teachers' behavior rating scale (figure 2). Here we find that in the unsocialized-aggressive group levoamphetamine was actually rated slightly better than dextroamphetamine (difference not significant). Both active drugs were significantly better than placebo. Again we find that in the overanxious-hyperkinetic group levoamphetamine is rated as not significantly better than placebo, and dextroamphetamine as significantly better than either placebo or levoamphetamine (table 1).

The parents' behavior checklist (figure 2) does not at first seem to show the same pattern. However, if we attend only to the differences that are statistically significant ($p<.05$ level), they do partially support the same pattern as the psychiatrists' and teachers' ratings. In the unsocialized-aggressive group both active drugs were rated as significantly better than placebo and not significantly different from each other. All differences for the overanxious-hyperkinetic group were not significant (see the results of comparison by one-tailed paired t test in table 1).

FIGURE 1

Comparison of Two Diagnostic Groups on Psychiatrists' Ratings of Drug Effect with Placebo, Dextroamphetamine, and Levoamphetamine*



* 1 = best possible rating; 7 = worst possible rating.

Individual factor scores for aggression, hyperactivity, and daydreaming-inattention on the pooled teachers' symptom ratings (11) likewise only partially showed the same pattern. The aggression factor showed comparable isomeric efficacy, as did the aggressive dog and the unsocialized-aggressive group. Further, the daydreaming-inattention factor showed a statistical gap in isomeric efficacy, as did the hyperkinetic dogs and the overanxious-hyperkinetic group. However, the hyperactivity factor showed comparable efficacy, a flaw in the pattern seen in the rest of the data.

To rule out dosage variation as a source of the differences in efficacy, the average number of tablets given per day for each drug condition was tabulated by diagnosis (see table 2). The range of dosage is rather narrow, and what variation there is tends to dramatize the observed differences rather than question them. The clinicians had been instructed to optimize the dosage on each drug condition. Therefore an ineffective drug would tend to be given in higher dosages, as shown by the placebo doses. For the overanxious-hyperkinetic group, where levoamphetamine seemed ineffective, the drug was used in a dosage comparable to placebo, while dextroamphetamine, which was significantly more beneficial, was used in a much lower dose. For the unsocialized-aggressive group, where levoamphetamine seemed as beneficial as dextroamphetamine, levoamphetamine was used in lower doses.

[1] The unsocialized-aggressive group included two brothers with a chronic history of frequent serious fighting, stealing, and lying; a boy who had been expelled from two schools for misbehavior and had set a $1,200 fire; and two other boys who were repeatedly suspended from school for fighting and other aggressive behavior and whose mothers asked for tranquilizers for themselves by the end of the boys' second week on placebo. One of these boys had thrown furniture at other children in the classroom. Both had a tendency to blame everyone else for their trouble; this sometimes verged on paranoia. Their parents seemed less adequate than those of the other two groups.

The overanxious group was characterized by likability, subjective distress, anxiety, some insight, at least one loving, stable parent, and generally higher intelligence than the other two groups.

The classical hyperkinetic group were also characterized by likability and at least one stable, loving parent. One of the children in this group was a postmeningitic kindergartener. Another carried the only diagnosis of mental retardation (borderline) in the study. His mother was concerned about his occasional bullying of smaller children, but this was not the most prominent manifestation of his problems, and the school did not complain about it. Because of his general disorganization and inadequacy, it seemed most appropriate to place him in this group rather than in the unsocialized-aggressive group.

TABLE 2

Comparison of Two Diagnostic Groups on the Average Number of Tablets Used a Day for Each Drug Condition

Medication	Number of Tablets a Day	
	Unsocialized-Aggressive Group	Overanxious-Hyperkinetic Group
Placebo	6.9	7.0
Dextroamphetamine*	6.5	5.7
Levoamphetamine*	5.7	6.9

* One tablet = 5 mg. of amphetamine sulfate.

DISCUSSION

The teachers' ratings and the psychiatrists' ratings of weekly parental assessments of target symptoms in a double-blind crossover study on hyperkinetic children, as well as careful laboratory observations on a hyperkinetic aggressive dog, all suggest that aggressive, hostile behavior may be a distinct (if not separable) part of the hyperkinetic syndrome. It seems to be helped by levoamphetamine as much as by dextroamphetamine, in contrast to anxiety and overactivity, which appear to be helped significantly more by dextroamphetamine. The observations made on laboratory dogs demonstrate this contrast in the same organism; the data from the children's study show it from patient to patient. While the nonaggressive children who were merely hyperactive benefited significantly only from dextroamphetamine, the most aggressive children enjoyed approximately equal overall improvement when taking either levoamphetamine or dextroamphetamine.

With regard to the latter, levoamphetamine, insofar as it has fewer "central side effects" than dextroamphetamine, may eventually become the drug of choice for the aggressive, hostile subgroup of hyperkinetic children who would be diagnosed by Fish's criteria as having "unsocialized aggressive reaction" (308.4). However, this is far from established by the data presented here, especially in view of: 1) the small numbers of children in the clinical study, 2) the retrospective nature of the assignment to diagnostic categories, 3) the failure of parents' ratings and pooled teachers' rating factors to confirm all the findings on psychiatrists' ratings and teachers' rating totals, and 4) the preliminary nature of the dog experiments. Further investigations on both animals and children are obviously needed.

Whether levoamphetamine (and dextroamphetamine) may be useful in treating other kinds of aggression remains unclear at this point. Goldman, Lindner, and Dinitz at Ohio State University are initiating a double-blind comparison of placebo, levoamphetamine, dextroamphetamine, and imipramine in sociopathic convicts that may provide some information along this line. However, it may be argued that the aggression seen in sociopaths is not really a different kind; there is a suspicion that at least some sociopaths are hyperkinetic children grown up.

The differential response to levoamphetamine, if upheld by further investigations, would tend to validate Fish's proposed diagnostic groupings for children with behavior disorders. Here, for the first time, we may have the beginnings of a diagnosis-treatment situation analogous to diagnosing pneumococcal pneumonia and treating it with penicillin rather than diagnosing Hemophilus influenzae pneumonia and treating it with ampicillin. Obviously, there remain many unanswered questions, some of which follow.

1. It would be difficult to guess from the currently available data whether or not the "classical hyperkinetic" subgroup of hyperkinetic children should be lumped together with the "overanxious" group with regard to drug response, whether it would be more like the "unsocialized-aggressive" group, or whether it would be different from either.

2. The place of learning disabilities in this scheme would need clarification. It is now known that some children who show primarily a learning disability without obvious behavior problems can also benefit from "stimulant" medication (12). Would such children in their drug response more closely parallel the unsocialized-aggressive group or the overanxious-hyperkinetic group, or would they constitute yet another group?

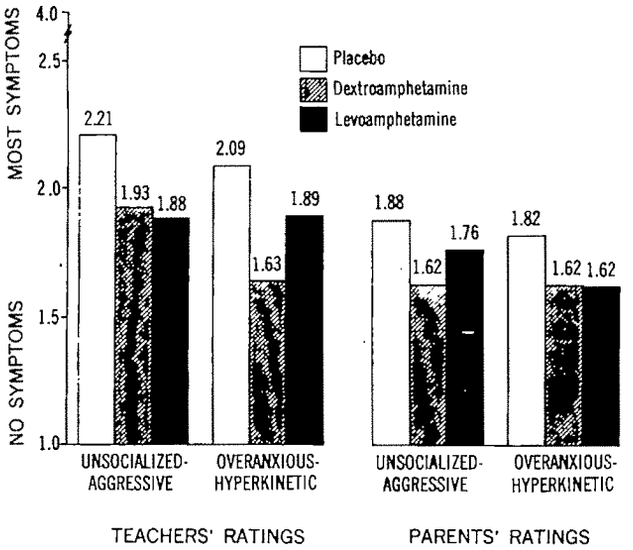
3. The possibility of synergism between the optical isomers of amphetamine remains unexplored. The biochemical literature scarcely recognizes the possibility except for isolated, brief speculation (13). In the clinical literature the occasional superiority of racemic (dl) amphetamine over pure dextroamphetamine is reported without explanation (3, 4). It could result from either synergism or merely an additive effect since the racemic mixture is usually given in higher doses than pure dextroamphetamine. Two clinical observations more strongly suggest a possible synergism:

A. Immediately upon completion of the double-blind, triple crossover comparison, six of the 11 children were given racemic amphetamine in the same total daily dose as an interim medication until the code was broken in order to determine which of the isomers they had fared best on. Out of curiosity, the clinician involved (L.E.A.) did not tell the teachers that the study had ended and had them fill out an additional rating scale for the child's behavior the first week he was on racemic amphetamine. Five of the parents also cooperated by filling out an additional parent's rating. This "piggyback" experiment was thus blind only in regard to the teachers' ratings. The racemic amphetamine was reported to be the most effective of all four drug conditions by both teachers' and parents' checklists for two of the children, by the teachers' checklist alone for one child, and by the parents' checklist alone for one child.

B. The other clinician in our original study (Keith R. McCloskey [11]) has since independently reported that he has found children who respond favorably to various ratios of dextro- and levoamphetamine but not to any other combination or to either isomer alone.

FIGURE 2

Teachers' and Parents' Blind Ratings of Two Diagnostic Groups' on Placebo, Dextroamphetamine, and Levoamphetamine*



* 1 = no symptoms; 4 = most symptomatic.

Though both of these data are open to many criticisms, they do suggest that the potency relationships of the optical isomers of amphetamine may be more complex than has been previously realized and need to be further investigated both for their practical clinical applications and for their value in elucidating basic neurochemical phenomena.

In a previous paper (11), the reasons were detailed for suspecting that, insofar as the levo isomer's efficacy matches that of the dextro isomer, amphetamine may help hyperkinetic children via a dopaminergic mechanism, whereas a wide disparity between the efficacies of the two isomers would suggest a norepinephrinergic mechanism. Briefly, Snyder and associates (13) showed that dextroamphetamine is ten times as potent as levoamphetamine in inhibiting catecholamine uptake by norepinephrinergic terminals and in eliciting locomotor activity in rats (believed to be norepinephrinergic) but that it is of comparable potency in inhibiting uptake by dopamine neurons or in eliciting stereotyped compulsive gnawing in rats, believed to be a dopaminergic-mediated syndrome.

Further suggestive evidence for levoamphetamine's dopaminergic mode of action may lie in its apparent slow attainment of efficacy compared with dextroamphetamine on psychiatrists' ratings (see figure 1). Such slow-starting efficacy in hyperkinetic children has also been reported (14) for magnesium pemoline, believed to be strongly dopaminergic (15). This slow onset of action also recalls that of the major tranquilizers, whose antipsychotic properties are suspected to be inextricably linked to their typical extrapyramidal side effects (which are probably antidopaminergic). However, no conclusions should be drawn on the basis of these scanty data, especially since the temporal pattern seen on psychiatrists' ratings does not emerge on teachers' or parents' ratings.

Supporting a dopaminergic mediation of aggression control, McKenzie (16) reported that apomorphine, believed to be a specific dopaminergic agonist, induces spontaneous aggression in male rats. Although this would seem to imply that dopaminergic drugs should exacerbate aggressive behavior, we must remember that some drugs have a paradoxical, reverse effect on some hyperkinetic children. At least, this finding supports the suspicion that dopaminergic receptors are "where the action is" for aggressive behavior.

In this light the data presented here suggest the following hypothesis for further testing: that the unsocialized-aggressive subgroup of hyperkinetic children may benefit equally from either dextroamphetamine or levoamphetamine via a dopaminergic mechanism, in contrast to the overanxious and hyperkinetic children who are helped significantly by only dextroamphetamine via a norepinephrinergic mechanism. This hypothesis is far from established, but there does seem to be enough suggestive evidence to warrant further investigations along these lines.

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PRELIMINARY ANNUAL MEETING PROGRAM

The March issue of the *Journal* will include the preliminary program for the 126th annual meeting of the Association, to be held in Honolulu, Hawaii, May 7–11.

No-Suicide Decisions: Patient Monitoring of Suicidal Risk

BY ROBERT C. DRYE, M.D., ROBERT L. GOULDING, M.D., AND MARY E. GOULDING, M.S.W.

The authors describe a simple, rapid method by which patients with any suicidal ideas can determine for themselves and the evaluator what risk actually exists. The patient states how long he is willing to stay alive, without qualification, in the form of a decision rather than a promise or agreement with the evaluator. This method has been used successfully in various settings and with seriously ill patients.

IN THIS PAPER we describe a method to be used by anyone evaluating a patient as a suicidal risk; the method enables the evaluator to make the following judgments: Is suicide a risk at all for this patient? If it is a risk, to what degree and for how long can the patient be trusted not to kill himself?

This second judgment is important at every stage of treatment in any setting, since on the basis of this judgment the evaluator or therapist (and the patient) will decide on outpatient versus hospital care and may decide to use the milieu, drugs, shock treatment, or psychotherapy in very different ways. (We have not used shock treatment with any patient evaluated under our method.)

Up to the present time no precise technique of measuring suicidal risk has been available to the evaluator. Various methods have been suggested for making the first judgment, including demographic and sociologic (1, 2), psychodynamic, clinical historical, and interpersonal (3–5), and biochemical (6) criteria. Longitudinal studies of major mental illnesses have indicated higher risk for suicide among recovering depressed and schizophrenic patients (7). A classification of suicidal styles (8) has also been suggested. Shein and Stone (9) have emphasized the importance of asking the patient directly about any suicidal thoughts—something that is not done often enough.

We believe that these approaches, which sometimes include rating scales and checklists, are useful in three ways. They increase the probability that the evaluator will make some judgment about suicide, they help him in deciding that some risk does exist, and they may suggest preventive techniques at a large group or community level. However, they do not help the evaluator enough with the second decision. On at least one scale (1), 35 percent of a group of high-risk patients actually committed suicide within a one-year follow-up (major attempts included). Such a high risk means that the evaluator must either excessively hospitalize the patient or trust him not to commit suicide, while not knowing what degree of risk exists for a particular patient.

Evaluative comments such as "points toward" are not precise enough in describing suicidal risk. They are likely to produce great anxiety in the patient, the evaluator, and concerned others. The psychiatrist, who may be appealed to by a less experienced or less professional evaluator, does not necessarily have more confidence. Aphorisms such as "You don't get paid for being smart, you get paid for sitting with this kind of patient" or "You won't be a real psychiatrist until you've lost one," which we remember from our training days, are neither comfortable nor useful with the individual patient. Many suicidal patients invite the evaluator to overestimate or underestimate the risk by dramatic or demanding behavior.

We believe that our method offers substantial advantages both for accuracy in planning with the patient and in removing the burden on the evaluator. We share the evaluation task with the patient. Since he is the one who is making the decision to kill himself or not, he has the best data—not only on how intense his urge is, but on how strong his controls are. Specifically, the patient can tell the evaluator how long, and under what conditions, he trusts himself to exercise control over his impulses. This approach developed out of our belief that the only therapeutic contracts likely to lead to change are those developed by the patient himself, for which he will assume responsibility. Particular therapeutic schools that emphasize this approach and that have influenced us include psychoanalysis, transactional analysis, and gestalt therapy. The only exceptions to this approach would be those patients who have organically impaired cerebral function. Psychotic patients who are willing to use this method can do so. The method will also work in any setting, including over the telephone, although there the evaluator's lack of awareness of the patient's body language may hinder evaluation.

METHOD

To begin with we have a high index of suspicion that suicidal fantasies may be present in any depressed patient

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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and in many patients with hypertension, a history of coronary occlusion, and other life-threatening illnesses. In addition to the indicators alluded to previously, we particularly investigate inappropriate laughter occurring during discussions of bad predictions (such as divorce, business failure, or illness). As part of history taking we often ask the question, "If things go badly for you, what will your life be like a year from now?" These are items developed from a checklist by Steiner (10) and, more recently, by McCormick (11) to put patients in touch with the many important predictions they make for themselves, often out of awareness. If any suicidal or self-destructive fantasies appear they are carefully investigated with the patient. These include fantasies of accidents, abuse of food, alcohol, or drugs, or exhausting work habits.

As soon as the evaluator believes that the patient is aware of his fantasies, he asks the patient to make this statement: "No matter what happens, I will not kill myself, accidently or on purpose, at any time" and to report his internal responses to this statement. If the patient reports a feeling of confidence in this statement, with no direct or indirect qualifications and with no incongruous voice tones or body motions, the evaluator may dismiss suicide as a management problem. In addition, the patient will often express considerable relief, since suicidal fantasies can be quite frightening. Finally, the settling of these fantasies frees patients who are not actively suicidal from ruminations they have been using to delay dealing with other reality or interpersonal or intrapsychic problems, since "If I'm going to commit suicide one of these days anyhow, why bother?"

The patient for whom suicide is an important issue will either object to or qualify the statement about suicide. The various qualifications will be described shortly; objections are classified as "I can't" or "I won't." A patient who will not make the statement is assumed to be suicidal, and he is advised that his choice is to make the statement with whatever qualifications he wishes, or have us make arrangements for his security. If he says "I can't," we ask him to say "I won't" and to report whether this is closer to what he is feeling. (Whether or not he feels he can control his suicidal impulses, he is obviously *able* to make such a statement.) If he changes to "I won't," we offer the choice between a statement and security arrangements, as before. At this point the evaluator can classify any patient as representing no risk, a very high risk, or a qualified risk. The qualifications are then considered under three major headings: No matter what; I won't kill myself; and Until. Dispositions for no-risk and very-high-risk patients are made as soon as the suicide issue has been settled for them.

Qualifications

Before considering the specific qualifications, how do we understand qualification? Anyone who is considering suicide finds it useful, if only in fantasy. In the present it may represent relief, revenge, and so forth. In the past it may represent a solution acceptable or even welcomed by significant others (12). Giving up the suicidal fantasy or behavior is experienced by the patient as a loss of a present problem-solving technique and/or fantasy gratifications. Qualifications enable the patient to psychologically avoid the loss since he retains his basic position of "I will only stay alive if " and has not made a decision not to kill himself. We use the term decision (or redecision [12]) because only the patient can act. If the statement is not experienced by the patient as a decision, we do not trust it. Since it is his decision, all qualifications involving the behavior of someone else, including the evaluator, are not accepted.

Until. The easiest qualification is time. While any time shorter than never allows for suicidal fantasy, we can plan very differently with a six-month safety margin than we can with an hour. A six-month span offers time for detailed therapeutic work on whatever reality or personal problem emerges elsewhere in the patient's qualifications. One hour allows the patient to make short moves unescorted, such as from our office to a nearby psychiatric ward. Furthermore, as the patient experiences even brief mastery of his suicidal impulses and begins to see possible solutions to his dilemma, he will usually fairly quickly extend his time qualification. It is our practice to ask for the longest time the patient will readily agree to; the shortest we will accept is that which allows the patient to see us or another reliable person. All decisions are renewed before their time expiration, regardless of any apparent clinical improvement in the patient.

I will not kill myself. The focus in dealing with patients using this qualification is on the first two words. We emphasize that a decision is possible, but only the patient decides. For instance, "Nothing will happen" is a much feebler statement than "I won't do anything." "I'll try," "I'd like to," and "I'll probably" are all countered with "But will you?" "I promise" is also shaky; like the statement in the previous sentence, it often has the flavor of a child being asked to do something by a parent that the child regards as too unpleasant or difficult. The child's response is intended to get the parent to stop asking and not as a commitment.

Evaluators who accept an "I'll try" statement are making the same mistake as parents who accept trying instead of doing without recognizing the difference. The patient's statement "I promise" provides many opportunities for setting up the evaluator as someone who is supposed to be disappointed, and the patient sets himself up for rebellion, shame, and guilt. Any decision he makes is not an agreement with the evaluator, but a self-contained choice. (This, of course, does not psychologically diminish the potential importance of the evaluator.) The "I" may be supported by shortening the time span, or the evaluator may choose to do some brief therapy around the statement "It sure seems important for you to be scared [angry, impulsive, confused]," reminding the patient that he has control over himself there, too.

No matter what. This qualification allows the patient to shift responsibility for a suicidal act to someone or something else. (It is often also, of course, related to important therapeutic issues, once suicide has been tem-

porarily removed from the foreground.) This type of qualification may be as vague as the philosophy "People should be allowed to dispose of their own lives their own way" or as immediate as "I don't like what you [evaluator] are doing." Common statements include "As long as my husband [wife, child, lover] does [or doesn't]," "Unless I get drunk [tired, upset]," "Unless work [school, marriage] goes better," or their only apparently positive variations, "I'm too attached to my children" or "I'm such a coward." The whole purpose of an unqualified statement as a decision is to get the patient past just these external sources of trouble. Even if these are dropped after a time limitation, we feed these qualifications back to the patient so he can hear how he uses others to increase bad possibilities for himself.

We don't argue with philosophical patients; unless they are willing to make a decision, they are going to be supervised like anyone else. One of us (R.L.G.) often asks such patients, "Would you be willing to consider that you are not the one who originally thought of knocking yourself off, and that it was a choice you made many years ago, which only seems to be your free choice now?" If they are willing to consider this possibility, we may do some work around their original decision (12) and then ask again for a decision now. The patient is in charge of how drunk or upset he is going to be and what options he will allow himself in his important life situations; the details of this will be central in therapy.

The evaluator also does not take responsibility. For instance, if the evaluator will realistically not be available for frequent telephone calls, this is included in the decision, i.e., "Even if I can't get hold of you." In practice, the evaluator will get occasional telephone calls, but many fewer than if he follows the common recommendations to tell the suicidal patient "I'm always available." (If the patient wants to call and we are available, we don't deny it.)

We previously noted that we ask the patient to state "I will not kill myself, accidentally or on purpose, at any time." "Accidentally" is intended to deal with those patients who are unaware that they are in a suicidal position and who have had automobile accidents or skiing accidents, are parachutists, or in some other way are seriously endangering their lives by their activities. Not everyone who skis or parachutes is in a suicidal position, of course, but everyone who doesn't fasten his seat belt, drives dangerously, or hurts himself skiing may be, and the truth may be obvious once the question is put to the patient. The same may be true of patients with hypertension or a history of coronary occlusions, who may become aware of the ways in which they are endangering their lives once they have made a full statement.

RESULTS

We have used this method with patients of all diagnostic categories in such diverse settings as Monterey County, Calif., and metropolitan Chicago, in hospitals, clinics, private offices, and community agencies, and in two- or three-day marathons with out-of-town patients both in California and throughout the country. Over the last five years approximately 600 patients have made no-suicide decisions. Our fatality rate with patients during a no-suicide time span is zero. (Two patients known to us did commit suicide; they had refused to make a decision, were hospitalized, changed therapists, and were not under any supervision at the time of suicide.) Furthermore, we are active clinical teachers and (particularly R.L.G. and M.E.G.) have presented this method to many mental health professionals locally and nationally at major meetings and teaching centers.

To date we have not heard of a failure when our criteria have been strictly applied. We have sent questionnaires to all our trainees regarding their results. Thus far 31 therapists have reported on 609 patients, 266 of whom they considered seriously suicidal. One patient killed herself outside the time period. Three patients died or made serious suicidal attempts within the time period. One patient who was assumed to have organic brain disease (epilepsy) made a serious attempt. Another patient died in an automobile accident. State police said she was driving at normal speeds and wrecked her car while avoiding a poorly marked mud slide. The third patient took a fatal overdose of sleeping pills while drinking heavily. The 31 therapists we surveyed reported 20 suicides or serious attempts in their practice where they had not used this method, usually before they were aware of it.

CASE REPORT

Case 1. A 22-year-old man was referred by a Veterans Administration hospital after three hospitalizations in the past year, two after serious suicide attempts with barbiturates. The patient stated on the first visit that he felt better, but that within a few weeks he expected to begin drinking, with progressive withdrawal and increasing suicidal fantasies. He made a no-suicide decision for a week. Over the next three weeks he became progressively more suicidal and suddenly left a session without making a decision. One of us (R.C.D.), the patient's therapist, called the police; the patient returned after learning of this and gave the therapist a knife he had been carrying. He made a new one-week decision, but after another week again felt very depressed and refused to make a decision. He immediately went home and threatened a younger brother, surrendering to the police when they were called. After a brief hospitalization at the local emergency ward he again resumed this pattern. After three weeks he requested rehospitalization at the VA. While there, in consultation with the VA staff, he was advised that we would not reaccept him as a patient without a six-month no-suicide decision. He made this decision December 15, despite the fact that his mother refused to have him live at home again.

He attended group therapy weekly and shifted from scoffing at himself for his decision ("just waiting to backslide") to a somewhat moralistic lecturing to others to stop feeling sorry for themselves. He first went on a diet and then stopped drinking, stopped smoking, managed to deal with several disappointments with friends by brief withdrawals, began a successful house-painting business, and otherwise described himself as being in the best condition in years. Later, in May, he suddenly

skipped two group sessions, and his landlady, who knew the therapist socially, called to express concern about his withdrawal and sleeping late. The therapist wrote him a brief note asking him to come in, particularly since the therapist wanted to renew the patient's contract, which he thought ran out about June 30. The patient came to the next group session on June 22 and described a very difficult period he had experienced both immediately before his contract expired June 15 and afterward. He had suddenly felt very depressed despite his successes and had some suicidal fantasies, which were strong but not as intense as those he had had the previous fall. After some expression of concern from the therapists and group members, and recognition of both his distress and success in mastering these fantasies, he readily made another six-month decision. He refused to make a longer one, saying, "I still need an escape somehow."

He then attended group sessions irregularly until last September 1, when he became concerned about a moderate return to drinking and social pessimism (essentially that he would not be able to get a girl friend). His no-suicide contract was to last until January, and he spent little time thinking about it, other than being aware that he might use some of his current difficulties to work himself into a mood where he would be reluctant to extend his decision. This patient comes from a family in which a number of serious suicide attempts have been made, and his father talked of or threatened suicide frequently when the patient was a boy. Dropping the idea of suicide completely will therefore mean a considerable personal change for this man, but the contrast between his behavior on six-month decisions and short decisions is very striking.

DISCUSSION

This combined diagnostic and management technique has very high effectiveness in reducing patient and staff anxiety and complete effectiveness in evaluating suicide risk. It is suitable for use by inexperienced nonprofessionals as well as by experienced professionals. There are two situations where its use requires considerable flexibility. One of these is long-term therapy, where the method itself becomes a major issue in the relationship and needs to be dealt with as a relationship issue in addition to its immediate practical value. The other situation is with patients who, even more than the man cited here, have made suicide the central theme of their lives. An adolescent and a 35-year-old divorcée, for instance, both spent most of every day working away from or toward suicide. As of this writing the adolescent, who has never hurt herself seriously, either on or off a decision, has withdrawn from treatment for six months, with no serious attempts; the divorcée has been briefly hospitalized several times. Both patients occasionally called the therapist or other help givers at times when they doubted that they could continue on a particular decision. With both of these patients, the emptiness of their lives without the excitement surrounding suicide and the importance of the therapist's reactions to the frequent decisions are important issues. Finally, this method is not safe with patients who use alcohol or other drugs heavily until they also decide to stop using these drugs destructively.

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A Survey of Attitudes of Chairmen of Departments of Psychiatry Toward Community Mental Health

BY ANTHONY F. PANZETTA, M.D., R. BRUCE SLOANE, M.D., AND HARRIET ARONSON, PH.D.

The authors conducted a survey of chairmen of departments of psychiatry to determine their attitudes toward community mental health and the extent of their departments' involvement in community psychiatry. Among their findings were: a majority of departments had some association with a community mental health center (CMHC); the larger the department, the more likely such an association; a majority of departments offered training in community psychiatry to their residents; significant research in community mental health was carried on by a minority of respondents; most chairmen had a favorable attitude toward community mental health; and a majority of chairmen were congenial to having a CMHC within their departments.

THE FUTURE OF community psychiatry and that of the community mental health center movement is dependent on many factors, important among which is the attitude of chairmen of departments of psychiatry, particularly those within medical schools. Since the orientation of tomorrow's manpower is being developed today, it is important to assess how the leaders of our major training institutions view community psychiatry today.

There is a wealth of published material that takes either a protagonistic or antagonistic position regarding community psychiatry, but we have found no material on attitudinal surveys related specifically to departmental chairmen. Some of these chairmen have published material that reveals their own attitudes but we were interested in considering departmental chairmen as a group, rather than separately.

We undertook a survey to accomplish two broad objectives. First, we wanted data regarding the current level of operational investment by departments of psychiatry in the community mental health movement. Secondly, we wanted to assess the current prevailing attitude about community psychiatry—as expressed by chairmen of departments of psychiatry.

At the time this work was conducted, the authors were all with Temple University Health Sciences Center, Philadelphia, Pa. 19140, where Dr. Panzetta is Associate Professor of Psychiatry and Director of Outpatient Services. Dr. Sloane is now Professor and Chairman of the Department of Psychiatry, University of Southern California, Los Angeles, Calif., and Dr. Aronson is now Professor in the Department of Psychology, North Texas State University, Denton, Tex.

Dr. Aronson's participation in this work was funded in part by a grant from the North Texas State University Faculty Research Fund.

METHOD

A questionnaire was devised and then sent to members of the American Association of Chairmen of Departments of Psychiatry. The total number of possible respondents to our mailing was 95. We asked that the questionnaire be returned by March 1, 1971, although we accepted questionnaires returned as late as June 1.

The questionnaire, which was divided into three sections, was designed to be brief in order to increase the probability that the respondents would return a completed questionnaire.

Section I asked the respondent for: 1) his name, 2) the name of the medical school, 3) the number of years he has been chairman of that department, and 4) the size of the department, i.e., five or fewer full-time faculty psychiatrists, six to 15, or more than 15.

Section II presented 13 statements that the respondent was asked to rate "as to their adherence to your current assessment of community psychiatry." Because of the connotations of some questions, it was thought that respondents might select the "disagree" response if they were presented only with a choice between "agree" and "disagree." To avoid this bias we differentiated the agreement response to "agree totally" and "agree." In the scoring, however, no differentiation was made between the two. The 13 statements are arranged below according to the use made of them in scoring; in the questionnaire itself they were arranged as numbered.

Attitudinal

1. Community psychiatry is a distinct subgroup within psychiatry, characterized by its own relevant data, hypotheses, and methods of operation.

3. Community psychiatry should be resisted lest it undermine the gains thus far achieved in psychiatry.

4. The community mental health center is a desirable structure that can complement a psychiatric department.

6. Community psychiatry should be quietly ignored until it disappears of natural causes.

9. The community mental health center carries an inevitable service demand that can only *subvert* departmental priorities.

10. Community psychiatry offers greater potential for beneficial changes in psychiatric education than it poses dangerous threats to psychiatric education.

12. The community mental health center is unwelcome and it threatens the proper development of community psychiatry.

Origins of Community Psychiatry

2. Community psychiatry is a creation of federal funding priorities more than it is a result of social psychiatric research.

7. Community psychiatry has developed as a consequence of the findings of social psychiatric research.

13. Community psychiatry has a long history of growth, and the community mental health center movement evolved out of that growth more so than as a result of federal enabling legislation.

The Community Mental Health Center as an Intradepartmental Structure

5. The community mental health center is a welcome treatment structure but is more appropriate outside a psychiatric department.

11. Community psychiatry is an orientation with poor definition that would be more properly within the action arm of sociology or anthropology, if there were such an arm.

Dropped from Scoring Because of Ambiguity

8. Community psychiatry, despite its social and cultural implications, should focus its treatment on individuals and small groups rather than on population groups.

Scaling

The seven attitudinal items were converted into a scale, scored to indicate the relative positions of the respondents in their attitudes toward community mental health. There were two difficulties in the scaling: first, some of the respondents abstained from responding to one or another of the items listed and, secondly, we wished to weight each item to reflect the extremity of position that agreement or disagreement would imply. In order to overcome these difficulties, the scale was constructed in the following manner:

1. Abstention was weighted zero.

2. All other items were weighted in proportion to the percentage of chairmen responding in a dissimilar manner. Thus, if the chairmen were equally divided in taking a position for or against an item, those who were in favor of community mental health were given the weighted score of +50 and those who were opposed, a score of −50 for that item. On questions that elicited more extreme positions, the weights reflected the degree of extremity. For example, if the group split at 15 percent for and 85 percent against community mental health on an item, the respondents favoring it were given a score of +85, indicating they had disagreed with 85 percent of the respondents in maintaining their positive position, while those who were opposed to community mental health were given a score of −15, indicating they had disagreed with 15 percent of their fellows in maintaining their opposition.

3. The weighted scores were summed for all seven items, translated to positive numbers, and divided by ten for ease of statistical manipulation. These summed scores were used to assign each chairman a single score indicating his relative position on a continuum of attitudes. This score will be called the attitudinal scale score.

The scores fell into a curve with a range of 0 to 50, with higher scores indicating greater acceptance of community mental health and lower scores suggesting rejection. The mean score was 39.6, the median was 40, and the variance was 11.9. The curve tended to skew, producing a peaking of respondents at the higher end of the curve. The scale may therefore discriminate more finely at the lower end of the curve (against community mental health), which is the part of the population this study particularly wished to examine.

There was no attempt to offer an unequivocal definition of community psychiatry. Since community psychiatry is inherently an ambiguous concept, we wanted to allow maximal flexibility to the respondents; their responses therefore reflect their own understanding of the concept of community psychiatry.

Section III of the questionnaire asked the respondent to indicate whether or not his department was associated with a community mental health center (CMHC) and, if so, to indicate whether the department directly sponsored the center, whether they shared sponsorship with other institutions, or whether the center was completely sponsored by other institutions. We also asked that they indicate whether or not their residents and/or medical students participated in the program of the CMHC, and whether or not they offered a fellowship in community psychiatry.

Finally, we asked the respondents to indicate the extent of their current and proposed future levels of research in relation to the activities of the community mental health center.

FINDINGS

Of the 95 possible respondents, 80 chairmen returned their questionnaires (an 84 percent return rate). The results are based upon the information obtained from those 80 respondents, with an occasional reduction of the total number in cases of abstention.

Associations with Community Mental Health Centers

Of the 80 respondents, 56 indicated that their departments had an association with a CMHC and 24 indicated that they did not. Of the 56 departments with such an association, 16 were direct sponsors. The remaining 40 either shared sponsorship or were related to a center that was completely sponsored by other institutions.

The presence of an association with a CMHC (with or without direct sponsorship) corresponded to the size of the faculty of the department. Of those departments whose faculties numbered less than 16, 62 percent were

related to community mental health centers, while 83 percent of the departments with 16 or more faculty members had community mental health connections. This difference approaches significance using the chi-square test corrected for continuity ($p<.10$).

Community Psychiatry Training

Whereas a large proportion (64 percent) of the chairmen indicated that their residents participated in community mental health center programs, they differed considerably in their attitudinal and operational investment. All departments directly sponsoring CMHC offered residents experience in those centers. One department offering such experience had no connection with any community mental health center and minimal involvement, either at present or in future expectation, with research related to community mental health. Of those 40 departments which were associated with community mental health centers but which did not directly sponsor the center, 34 offered their residents experience in the associated centers.

Medical students were offered experience in a CMHC by 44 departments (55 percent) while 35 departments (44 percent) offered no such experience. Fellowships in community psychiatry were reported to be available in 18 departments (23 percent) and not available in 60 (75 percent).

Research Investment in Community Mental Health

The chairmen were asked whether their current departmental research was unrelated or marginally related to community mental health centers or whether it was definitely or heavily related; all but one chairman responded. Forty-six chairmen (58 percent) indicated that departmental research was unrelated or marginally related. Thirty-three chairmen (42 percent) indicated that their research was either definitely or heavily related to community mental health.

Of the 56 departments with CMHC associations, only 30 (54 percent) indicated current "definite" or "heavy" investment in community mental health research.

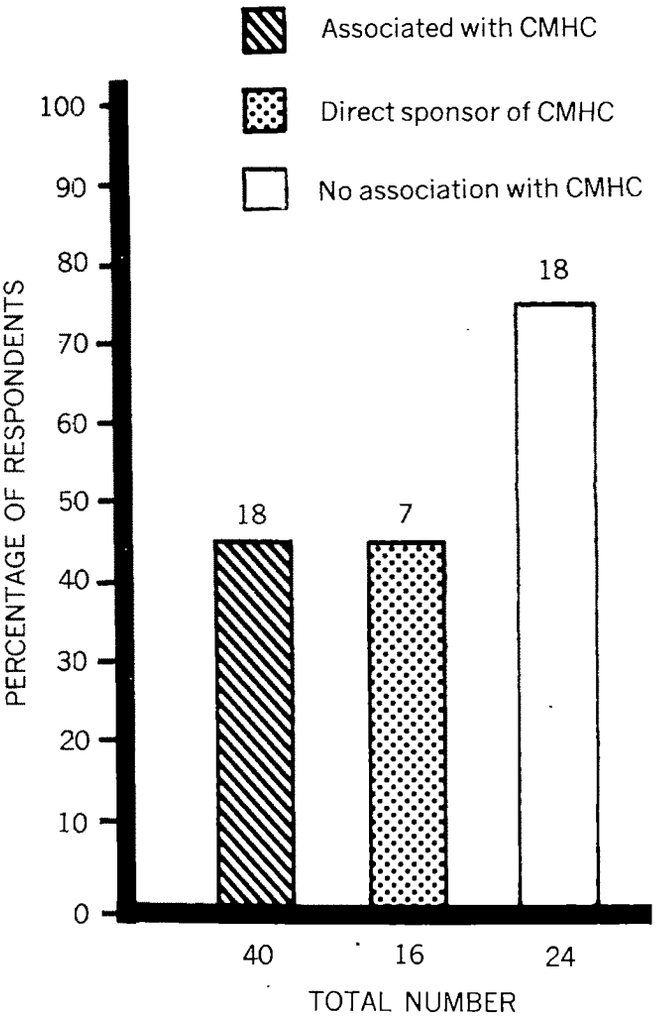
When asked about future projections of their research investment in community mental health the group with definitely to heavily related research jumped from the current level of 42 percent to a level of 68 percent.

Attitudinal Findings

The attitudinal phase of the study focused on the overall attitude ratings and their comparison with the foregoing variables: CMHC associations, community psychiatry training, and research investment in community mental health. We also compared those factors with: 1) opinion regarding the origin of community psychiatry (i.e., federal funding, research findings, or general evolution), and 2) attitude as to whether a community mental health center is more appropriate in or out of a department of psychiatry.

1. *Overall Attitudes.* As noted earlier, the final scores on the attitude section were scaled from 0 to 50, with a mean of 39.6 ±11.9 and a median of 40. Of the 79 respondents who were rated, 17 (22 percent) had scores of 30 or less. These respondents could be considered as having the most negative attitudes regarding community psychiatry. Of these 17 respondents, interestingly enough, 13 have associations with CMHCs and two are in the position of sponsoring CMHCs.

FIGURE 1
Prevalence of Opinion That Community Psychiatry Is a Creation of Federal Funding, by CMHC Association



2. *Opinions Regarding the Origin of Community Psychiatry.* When asked whether "community psychiatry is a creation of federal funding priorities more than it is a result of social psychiatric research," 43 respondents (54 percent) replied in the affirmative. Thirty-one respondents (39 percent) felt that community psychiatry was not a creation of federal funding priorities; these respondents also felt that community psychiatry developed as a consequence of social psychiatric research and/or as an evolutionary outgrowth of long-standing trends. Five respondents (seven percent) were undecided.

When we contrasted the scores of these groups on the attitude rating scale we noted a significant difference. The

TABLE 1
Comparison of Attitude Scale Scores According to Level of Involvement with a Community Mental Health Center

Category	Number	Mean Score
Respondents without CMHC associations		
Congenial to CMHC within department	11	44.9
Prefer CMHC outside department	13	35.6
Respondents with CMHC associations		
Direct sponsor	16	43.8
Associated but not sponsor	40	37.7

group who accepted federal funding as the origin had a mean attitude rating of 37.88, as opposed to 42.94 for those who held the opposite position ($p<.05$, by two-tailed t test).

When we separated the direct sponsors of community mental health centers (16 respondents) from those who were associated but not direct sponsors (40 respondents), we discovered that being associated with a center (with or without sponsorship) did not correlate with a position against federal origin. The sponsors took a position against federal origin by a slight majority (56 percent), while the nonsponsors took a position for federal origin in 50 percent of the responses. But having no CMHC association was significantly related to a position favoring federal origin (see figure 1).

3. *Appropriateness of CMHCs Within Departments of Psychiatry.* When asked whether or not departments of psychiatry were appropriate sponsors of community mental health centers, 32 respondents (40 percent) answered in the negative, 43 (54 percent) felt the CMHC was welcome and appropriate within a psychiatric department, and four (five percent) were undecided; one did not respond.

As would be expected, chairmen who were congenial to the presence of a CMHC within their department showed a more favorable attitude toward community psychiatry (mean score of 43.9 versus 33.1). These same chairmen were more likely ($p<.03$) to actually sponsor a CMHC and even more likely ($p<.01$) to offer community psychiatry as part of the residency training experience.

When we compared the current research investment of the group preferring the center within the department with those preferring extradepartmental affiliation, we noted that the respondents from the "within the department" group were divided evenly as to whether they were not carrying on related research or whether they had significant to heavy research in community psychiatry. However, of the 30 respondents who claimed a heavy investment in such research, 73 percent preferred having a center within the department.

An interesting point emerged when the attitude of respondents was compared with whether or not they offered their residents experience in community psychiatry. We found that those respondents whose departments offered such an experience had a mean attitude score (39.6) identical to that of respondents who did not offer their residents experience in community psychiatry.

We did, however, discover a significant difference in attitude ($p<.05$) between those who had no community mental health center associations but nonetheless felt congenial toward having a CMHC within their department and those who neither had any CMHC association nor felt that one would be appropriate within their department (see table 1). Within the subgroup of respondents who had community mental health center associations, those who directly sponsored CMHCs tended to have significantly more favorable attitudes ($p<.10$).

DISCUSSION

What can we conclude from an analysis of these responses? It must be stated from the outset, of course, that we can generalize only with great caution. The instrument used in this study was not sophisticated and little can be said about its sensitivity or validity. However, it does seem reasonable to make certain statements that appear to be reinforced by the data obtained.

First, there is the straightforward counting of departmental activity with community mental health centers. The data show a great deal of such activity in general, although only a small percentage of departments have actually jumped in with both feet and directly sponsor CMHCs. We can also see that training in community psychiatry has become part of a solid majority of all residency programs. The data reveal, however, that community psychiatry has found its way into a bare majority of the curricula for medical students. What the quality or quantity of these experiences are like cannot be inferred from the data.

We did not discover a greatly resistant or hostile attitude toward community psychiatry and, if anything, the data suggest more congeniality than might have been anticipated. We were interested to note that community psychiatry is considered by a majority of chairmen to be a federal creation and that this connection is associated with a tendency toward a negative attitude.

Although promises for the future were great, current research investment in community psychiatry was marginal in most departments. This is not an encouraging sign if one takes the position that any new trend in psychiatry should be directed and supported by research. Since this survey focused only on medical school departments of psychiatry, we can say nothing about research in other settings. It is possible to speculate, however, that at least within the academic establishment, community psychiatry does not often enjoy the prestige associated with other research-worthy areas.

Modern Man and His Instinct of Workmanship

BY JUANITA M. KREPS, PH.D.

The author examines the place and meaning of work in contemporary American society, its relationship to the amount and quality of leisure time that is available, and its relationship to the worker's physical and mental health.

> No other technique for the conduct of life attaches the individual so firmly to reality as laying emphasis on work; for his work at least gives him a secure place in a portion of reality, in the human community.
>
> —SIGMUND FREUD (1, p. 27)

IN IMPUTING TO WORK a balancing factor, which contributes to the equilibrium of an individual (2), Freud nevertheless noted that "work is not highly prized by men. They do not strive after it as they do after other possibilities of satisfaction" (1, p. 27). Contemporary authors further stress the negative aspects of today's work; since most men work from economic necessity, they argue, work itself brings no sense of achievement:

> This is the tragedy of the human being, for it is only through work that he can exert his influence upon society. And while he rejects the amorphous, distasteful shape it has assumed today, he must subject himself to the lashes of necessity via the cash nexus. All that remains is a pecuniary reward, often of a pitiful nature, replacing the urge to undertake acitvity for its own sake. Humanity is thereby diminished (3, pp. 342–343).

Yet if work is so distasteful, why work so much? We could live well on far less income and presumably therefore with less time and effort spent on work. Given the rapid changes in the types of work we now perform—in particular, the trend from manual to white-collar, notably professional, jobs—it is well to reconsider the meaning of work, the reasons for man's persistent work drives, and the sources of frustration (and possibly health impairment) that attend the performance of today's most demanding jobs. Important questions pertaining to the relationship of work to physical and mental health, raised frequently in the past, take on new significance in the light of economic trends. On the one hand, higher productivity promises to free us from work for ever longer stretches of time; on the other hand, work apparently becomes more appealing as its content shifts from the manual to the mental, and this trend counteracts the decline in work emphasis.

If enthusiasm for work, because of its content or the professional or financial status it confers, comes to be even more central to life than heretofore, the leisure and health implications for some occupational groups assume added significance. In particular, as executives and professionals devote more and more of their time to work that is often quite stressful, thereby failing to share in the overall growth of leisure time, what impact does this work life-style have on their health?

THE DISAPPEARANCE OF WORKMANSHIP

Throughout the literature on work—the satisfactions, the monotony, and the alienation it produces; the role of monetary incentives; the impact of work on mental health—differential effects are imputed to various kinds of work and to different classes of workers. There is a strong tendency to assume that work satisfaction is maximized when the worker has a close and continuous relationship to the good he produces (note the glorification of crafts, for example), when the work calls for a high order of intellectual ability, or when some form of glamour, often physical danger, is involved. By contrast, jobs of low esteem are thought to be machine-oriented and mechanical, requiring little knowledge or skill, and allowing no exercise of ingenuity or personal judgment.

The association of work with physical unpleasantness is no longer a major factor in the disutility of work; relatively few jobs now require extremes of temperature or heavy manual activity. Instead of the physical discomforts formerly associated with most labor, today's workingman suffers from monotony, lack of control over the pace or content of the job, or a failure to perceive

This is an edited version of the William C. Menninger Memorial Convocation Lecture, read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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meaning in the restricted assignment of his tasks. Finer and finer divisions of labor, applauded by Adam Smith and subsequently perfected by two centuries of efficiency experts, rob the work of any breadth and the worker of any workmanship. In contrast to Veblen's "savage state," in which workmanship, i.e., the instinct to work efficiently, was dominant (4, 5), the motivation to work has come to be not work itself but the acquisition of wealth, which symbolizes esteem. Thus, according to Davis, Veblen reasoned that

> as the emphasis on competitive rating increased, any method of acquiring the desired symbols was accepted, provided only it promised success. Consequently a tendency to turn to force and fraud appeared. Success gradually came to be stated in terms of predatory exploit, and labor became dishonorable (6, p. 284).

But Veblen's conclusion that the earlier centrality of work has been subverted can be challenged. As Seligman pointed out, man continues to look for meaning in what he does: "Work is the most important activity in which man engages, for it provides *the* standard of judging his worth" (3, p. 338). Conflict arises when man attempts to impute meaning to work but finds that the technology that has increased productivity has also tended to render work mechanical and monotonous (3, 7):

> Meaning disappears as work takes on the character of a continuous process. When this happens those humans utilized by the process become mere automatons. And a civilization that distorts a human response in this manner is itself gross and distorted (3, p. 340).

THE APPEARANCE OF LEISURE

Deterioration in the quality and meaning of work has contributed to the drive for a reduction in the amount of time spent on the job. Time free of work for pay—frequently equated with leisure [1]—has grown dramatically during the twentieth century, the major change being in the length of the workweek. From an average of 53 hours per week in 1900, the workweek fell to 40 hours in 1970. Annual vacations, which account for a relatively recent growth in leisure time, increased in total amount by about 50 percent during the decade of the 1960s, with the average vacation for full-time workers growing from 1.8 to 2.2 weeks per year. Paid holidays have also grown in number; office workers now receive about eight paid holidays per year and factory workers about 7.5 (8).

Perhaps even more significant than reductions in the length of the work year is the number of years in which today's worker does not work at all. He enters the labor force much later in life and has several more years in retirement than his grandfather. Specifically, the twentieth century has brought an additional nine nonworking years to the American man, an increase of 50 percent in time spent outside the labor force. These nine years are divided about half and half between years in school and years in retirement. Since man now lives longer, his work life has also grown (in total, by about nine years); this increases the 1960 life expectancy at birth for men by 18 years, while women gain 22 years in life expectancy, with 14 going to paid work and eight going to further education and retirement (9).

Thus, technology is ambivalent in its consequences: it automates man and contributes to his alienation in work, while also increasing his output and allowing him time for other pursuits. Such time free of work is a luxury available to only a small proportion of the world's population. Retirement from work, along with the shortened workweek and later entrance to the labor force, are possible because man can produce enough goods and services to meet his family's needs in fewer than 12 hours a day—and in a work life shorter than one beginning at age 14 and ending with death. In less productive economies, it is not possible to subsist on the output of a short workweek, nor is it possible to keep children in school until age 18. Output is so low that all persons must work practically all their lives. Leisure in any form invites starvation.

THE QUALITY OF LEISURE

But just as the quality of work has depreciated under the relentless thrust of technology, so too the quality of free time is questionable. Contemporary views of leisure are hard to fathom. In contrast to Aristotle's belief that "the goal of war is peace, of business, leisure," the uneasy feeling that life with little work has little purpose pervades much of today's thought. Writers deplore the growing freedom from work, which provides "a great emptiness," devoid of meaning. Lacking training for leisure time and having no strong interest or devotions, persons without work lead dismal lives. The void created by free time has thus replaced "the days when unremitting toil was the lot of all but a few and leisure was still a hopeless yearning" (10, p. 54). On the quality of leisure, Seligman concluded that "leisure ought to be a serious activity; instead, it has been corrupted by the technology of industrialism and thereby converted into unfree engagements of time" (3, p. 356).

By far the most serious indictment of modern man's work-leisure patterns has come from Swedish economist Steffan Linder, who opened *The Harried Leisure Class* with the statement:

[1] The definitions of leisure are many. At one extreme, the term is used to refer to all nonworking time; at the other, it applies quite restrictively to that time which is completely free of commitments—in short, contemplative time. The concept of leisure as "discretionary time" has also been developed, and for many purposes this is the most meaningful use of the word. Nonworking time, or time free of work for pay, is used here; even this narrow use of the term does not preclude some definitional problems.

> We had always expected one of the beneficient results of economic affluence to be a tranquil and harmonious manner of life, a life in Arcadia. What has happened is the exact opposite. The pace is quickening, and our lives in fact are becoming steadily more hectic. It used to be assumed that, as the general welfare increased, people would become successively less interested in further rises in income. And yet in practice a still higher economic growth rate has become the overriding goal of economic policy in rich countries, and the goal also of our private efforts and attitudes (11, p. 1).

Since economic growth confers more income per working hour, man is urged on to work harder and harder as the price of foregone effort (i.e., free time) becomes more and more expensive. Thus time becomes increasingly scarce in relation to all its possible uses, and life takes on its modern hectic pace. In a similar vein, Wilbert Moore pointed out a decade ago that "in the world of common-sense experience the only close rival of money as a pervasive and awkward scarcity is time" (12, p. 4). Moore added, incidentally, that "loyalty or affection, too, turns out to be a universal scarcity upon close examination." It is probably not productive to apply the law of scarcity to loyalty or affection, but the basic principles do pertain to the use of time, as Linder illustrated.

As time comes to be more valuable, it is understandable that the use of each hour will be scrutinized carefully; one does not willingly "waste" time, not even when he is off the job. Consider the sale of consumer goods designed to reduce the time necessary for cooking, travel (even for pleasure), and personal and household maintenance. Other activities, such as visiting the indigent and caring for children and old people, are coming to be institutionalized in such a way that they often constitute work for pay; in the absence of such organized activity, the elderly in particular are likely to be neglected, for there is clearly implicit in our reluctance to provide adequate care for the aged the belief that such attention to their needs is wasted. Are their productive years not over? And does the allocation of time to their needs not fail to maximize the use of the time of productive workers?

WORK, LEISURE, AND HEALTH: SOME QUESTIONS

The constant drive to produce, to use time wisely, and to increase one's position or income through extra work pervades all we do. Playwright Walter Kerr noted that "we are all of us compelled to read for profit, party for contacts, lunch for contracts, bowl for unity, drive for mileage, gamble for charity, go out for the evening for the greater glory of the municipality, and stay home for the weekend to rebuild the house" (13, p. 39).

The important question becomes: is this modern version of the work ethic that now dictates the pattern of our lives, both on and off the job, the balancing factor once imputed to it? Freud's contention that work binds the individual closely to reality can hardly be questioned; men who are at work most of their waking hours indeed have "a secure place in a portion of reality." Moore's thesis that a man's perceived scarcity of time is an index of his integration into society (12, pp. 38–39) is a cogent observation of the same proposition. But is it not also true that this integration has become so complete, for a certain group of men, that it threatens to be unbalancing, that these men are so consumed with their work (in whatever guise) that they lose rather than gain balance?

The group in question has traditionally been small, relative to the total work force. From earlier studies by Wilensky (14), we know that the "long-hours" men are generally those with higher earnings, very often professionals and executives. One-third of the high-income men in his study worked 55 hours or more per week. Although there were some differences in work schedules among the professions, hours were high in most. Business executives, moreover, averaged a workweek of 50 hours, excluding business entertaining at home, travel time to work, and business travel. Being self-employed or Jewish or having a high income tended to raise the propensity for long hours. The fact that these men have not gained leisure during the 20th century's rapid economic growth, which brought significant reductions in working time to workers in general, prompted Seligman to comment: "The irony is that those whose productivity is highest work to support the leisure of those who are compelled to enjoy it" (3, p. 357).

One test of whether the work drive has become an unbalancing influence in the lives of the long-hours men emerges from examinations of the impact of work on physical and mental health. The importance of such an analysis is underscored by the recent upturn in the mortality rate for men. During the 1960s the course of mortality for both white and nonwhite men was upward for most age groups, starting at 15 to 19 years of age. Since the mortality rates for women did not rise, the trend toward excess mortality for men was resumed, after having leveled off in the 1950s (15). In the middle years, in which the man's work pattern would generally be most demanding, the mortality rate of white men in 1968 was double that of white women; heart disease accounted for three-fifths of the difference, with the mortality rate of white men from this cause being more than three and a quarter times that of white women. For white persons, the ratio of male to female age-adjusted death rates, which was 108 in 1920, has climbed to 175; for nonwhites, the ratio has gone from 97 to 163 (16).

The literature relating work to mental and physical health is overwhelming, ranging from detailed studies, such as Madigan's "Are Sex Mortality Differentials Biologically Determined?" (17) and his analysis of the impact of work satisfactions on the length of life of Catholic priests (18), to broader analyses of interdisciplinary research on the effects of the social environment on mental health (19). In the studies pertaining to work and mental health, attempts are made to appraise the meaning of work to particular groups of workers—those in factories (20–23) and those on farms (24)—and the effects of these occupations on the spirit and life adjustments of

workers. Kornhauser concluded that mental health [2] "is poorer among factory workers as we move from more skilled, varied types of work to jobs lower in these respects; and that the relationship is not due in any large degree to differences of pre-job background or personality . . . " (21, p. 46).

Other inquiries probing the relation of occupational status to physical and mental health have raised many questions, particularly on the issue of linkages between job stress and health. Studies have indicated that men under age 45 who are subject to intense competition, deadlines, long hours, etc., have higher cholesterol levels and a greater incidence of coronary artery disease than their counterparts in less stressful jobs (25). However, the studies also suggest that the stress may derive more from the worker's intense ambition than from the job itself. A key question is whether the problem lies in the confrontation of low job status with strong ambition; where jobs allow high accomplishments as outlets for high ambitions (as in the case of executives), health adjustments are permitted (25, p. 72).

The discrepancy between aspiration and achievement, and the impact of this discrepancy on one's self-image and ultimately on one's mental health, has been examined in numerous studies, following Merton's view of "psychiatric disorder as one possible adaptation to the disjunction between cultural success goals and socially structured opportunities" (26). From controlled studies, the evidence indicates that educational and occupational discrepancies exist more often, and are greater, among psychiatric outpatients than among nonpatients. Such studies confirm the majority view of psychologists that unrealistic goals are more characteristic of the mentally ill than of the normal person, and that of sociologists, who report that "unfulfilled ambitions are characteristic of the mentally ill" (27, p. 479).

THE SPECULATIONS OF AN ECONOMIST

The distinction between mental stress generated in the job itself, because of the work's pace, complexity, or degree of competitiveness, and that originating from personal ambition and unrealistic career goals is difficult to draw. It is clear, nevertheless, that men holding high-status jobs are deeply concerned with their performance in the work place; it is this arena in which such men are judged. Their preoccupation with work may spring primarily from a drive for financial gain, as Veblen argued, rather than from a devotion to the service being rendered. Indeed, there is a tendency to reason that pay provides the major motivation for work.

> Pay, in one form or another, is certainly one of the mainsprings of motivation in our society. The drive for private money gains—the profit motive—provides the main ideological cleavage in the world today. Deep down, everyone assumes that we mostly work for money (28, p. 3).

Among blue-collar workers, who are often unionized and who therefore voice common sentiments at the bargaining table, there is a clear preference for more work for pay rather than for more free time. The fact that these workers have gained time free of work is explained by the gradual decline in demand for their services and by consequent attempts to spread the available work. Competition for overtime work has been keen, even as the workweek was bargained downward. Similarly, the three-month sabbaticals available to steelworkers and the early retirements offered to automobile workers were attempts either to prevent involuntary layoffs or to create new jobs.

The world inhabited by the professional and the executive is quite different. There, the demand for personnel has far exceeded the supply during recent decades because the amount of work requiring professional or executive training has grown, not diminished. Moreover, the rate at which society could increase its supply of highly trained personnel has only begun to match the growth in demand for their services. As a result, there has been strong pressure on these groups to work longer hours and forego vacations—in short, to increase the time and effort devoted to work.

The difference between the blue-collar worker and the professional lies not so much in a difference in the amount of work preferred as in the availability of work, given the economic trends. But while both groups would seem to opt for more work, not less, the reasons for seeking additional work may well differ. If we are to take seriously the literature on alienation from work, we must conclude that most industrial workers see work simply as a means of livelihood; they find their meaningful activities in other contexts. But among professionals the centrality of work is quickly apparent.

If the growing group of professionals and other highly educated, work-motivated persons have the "pathological desire to toil," how different is this pathology from the instinct of workmanship that Veblen praised? Does the work drive, now bound up with personal ambition for status within the profession or with the financial success that in turn confers the aura of professional success, provide the balance that Freud attributed to work? Or have we reached the point where work has been swallowed up in the desire to achieve a status that only work, in our society, can confer? To what extent do we judge ourselves by the quality of the services we provide, and to what extent by the recognition our services receive? And finally, what is a healthy attitude toward work? To work more hours or fewer? To be motivated by a desire to provide service, or to make money, or to build a reputation?

It may well be that modern man, too, has a strong instinct of workmanship. Indeed, it may be that he is too concerned with work, too little committed to play, too scornful of the gay and the lighthearted. We live in an economy that can afford more relaxation from work than

[2] Kornhauser defined mental health as "an overall orientation and balanced relationship to the world which permits a person to maintain realistic, positive belief in himself and his purposeful activities" (21, p. 46).

its people seem willing to embrace. Clearly, we feel that the rewards from this life-style are great. But most of us have had little experience with the alternative, and all (save possibly the young) have quite forgotten that "the goal of war is peace, of business, leisure."

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Social Psychiatric Impairment: Racial Comparisons

BY JOHN J. SCHWAB, M.D., NANCY H. McGINNIS, M.A., AND GEORGE J. WARHEIT, PH.D.

From a large-scale epidemiologic study of the mental health needs and services of a southeastern county, randomly selected groups of black and white respondents were compared with respect to social and demographic characteristics, symptoms and indices of psychological distress, effects of emotional distress on daily functioning, interpersonal and familial networks, aspiration and satisfaction, and a comprehensive rating of social psychiatric impairment. The authors relate the racial differences on these dimensions to social and economic deprivation and to social change in the South.

EARLY WRITINGS ON MENTAL ILLNESS among blacks in the United States, which first appeared in the 1890s, dealt primarily with the apparently rapid increase in the "colored insane." Witmer (1) noted that the subject of mental illness among blacks before the Civil War "received but little attention." Incredibly, the 1860 census reported only 766 "colored insane," most of whom lived in the North, out of a total black population of 4,441,830. The number increased to 6,776 in 1890, a change from 17.5 per 100,000 in 1860 to 88.6 per 100,000 in 1890.

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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This study was supported in part by Public Health Service grant MH-15900 from the National Institute of Mental Health.

TABLE 1.
Demographic Characteristics

Characteristic	Black (N = 98*)	White (N = 220*)
Sex		
Male	30	86
Female	68	113
Age		
Less than 30	25	97
30–44	26	44
45–59	29	48
60 and over	17	29
Marital status		
Never married	15	46
Married	44	138
Widowed	13	9
Separated or divorced	19	7
Other (common law marriage)	7	0
Income		
Less than $3,000	41	25
$ 3,000– 5,999	36	38
$ 6,000– 9,999	13	60
$10,000–14,999	3	49
$15,000 and over	0	39
Education		
Less than ninth grade	34	30
Some high school	26	22
High school graduate	24	32
Some college	8	71
College graduate	3	30
Some graduate work	1	12
Graduate degree	1	19
Occupational category**		
Lower (service, private house workers, laborers)	49	18
Middle (clerical, craft, operative, sales)	11	45
Upper (professional, technical, proprietor, manager, etc.)	6	57

*The original sample N was reduced from 322 and the Ns listed here were reduced by missing observations or unavailable information and by the exclusion of three respondents whose race was classified as "other" (e.g., Oriental, American Indian, etc).
**Does not include housewives, students, unemployed, or retired persons.

Witmer (1), Babcock (2), Greene (3), O'Malley (4), and others (5, 6) believed that this increase was not a statistical artifact; they attributed it to the changed conditions of life following Emancipation—primarily removal of the black from the complete dependency of slavery and his introduction to the stresses of competitive life. Although most of such reports were based on fragmentary evidence or derived from anecdote, deleterious socioenvironmental factors were also mentioned. Unhygienic surroundings, sexual promiscuity, injuries sustained at laboring jobs or from intraracial aggression, and a poverty-stricken condition were considered responsible for high rates of psychosis associated with syphilis, trauma, and senility.

Fifty years later Malzberg (7) found that the rate of first admissions to state hospitals was higher for blacks than for whites. He concluded that environmental factors associated with poverty and segregated housing could provide "ample explanation of the high rate of mental disease among Negroes" (7, p. 394).

Of course these studies yielded information only about persons who entered treatment facilities; they cannot be used for analyses of prevalence. Particularly in rural areas, many mentally ill persons stay in the community, protected by cultural patterns or living as isolates. In their analysis of 44 field studies of social status and psychological disorder (8), the Dohrenwends found that only eight investigations presented white-black comparisons. They concluded: "There is no evidence of a difference in the studies comparing rates for whites and Negroes. Of the eight studies . . . four reported higher rates for whites and four for Negroes" (8, pp. 13–16).

But the Dohrenwends did find that the highest rate of psychological disorder is consistently in the lowest social class, many of whose members are blacks or belong to other minority groups. The purpose of this article is to compare the rates of social psychiatric impairment in blacks and whites in a random sample of a southeastern community.

DESCRIPTION OF THE STUDY

In 1968 we began a psychiatric epidemiologic study of a representative ecological area of the Southeast. The county has been undergoing rapid social and cultural change, as evidenced by accelerated population growth, urbanization, and the influx of a new technologically oriented, educated elite. With these changes the old and the new coexist. Despite the rural-urban shift, some blacks live in rural enclaves. Recent massive school desegregation has disrupted the entire community; and the deprived-affluent imbalance is striking.

Our general hypotheses are centered on the impact of social and cultural change on mental health and illness. Social change refers to alterations in the social hierarchy, occupational redistribution, and urbanization. Social change is intertwined with cultural change, which refers to alterations in life-styles, values, and beliefs. Our theoretical framework is derived in part from concepts of the "marginal man" developed by Robert Park (9) and elaborated by Stonequist (10). These early works depicted the mulatto or the Eurasian as the prototypic marginal person—straddling two antagonistic cultures but belonging to neither. With the massive social change and the culture lag about us, and with increasing sociopolitical polarization, the blacks, once perceived sociologically as a homogeneous group, are stratifying and holding various allegiances. In our work, therefore, we are concerned with this increasing marginality and with the mental health and illness of these more numerous marginal groups.

In view of the controversy about and the limitations of traditional models of mental illness, we are measuring social psychiatric impairment. This concept includes a so-

cial view of both mental disorder and deviance. Social psychiatric impairment encompasses psychosocial distress along four dimensions: 1) traditional definitions of psychopathology, reported as the presence or absence of symptoms; 2) levels of functioning at home, at work, and in the broader social arena; 3) the quality and quantity of interpersonal relationships; and 4) indices of aspiration and satisfaction. In our clinical research we are developing and refining this concept.

We interviewed a random sample of almost 2,000 adult respondents in a 900-square-mile county with a population of 100,000. Table 1 shows the demographic characteristics of the preliminary sample of 322 respondents.

Black males are underrepresented; the blacks are generally older than the whites; and substantially more of the blacks are widowed, separated, or divorced. The greatest differences between the races are that almost one-half of the black sample has an annual family income under $3,000, one-third has less than a ninth-grade education, and more than one-half is employed in a lower-status job.

The interview schedule, which took two hours to administer and contains 317 items, covered demographic data and a comprehensive social history; familial and other interpersonal networks; indices concerning religion, racial distance, anomie, and perception of social change; extensive physical and mental health inventories; and patterns of health care. Both black and white interviewers participated in gathering the data, and a number of local black consultants assisted us with the project. Three psychiatrists independently rated each of the 322 pretest protocols for level of social psychiatric impairment; their ratings were averaged for a composite score. (More than 100 psychiatric inpatients and outpatients were rated for purposes of validation.) Table 2 shows the impairment ratings according to racial distribution (N=322).

TABLE 2
Social Psychiatric Impairment and Race

Impairment Level	Black (N = 95*)	White (N = 220*)
Not impaired	58	159
Mildly impaired	30	48
Moderately impaired	7	13

*Ratings were not available for four respondents and three respondents of other racial categories were excluded.

RESULTS

Symptom Inventories and Items

On Z scores derived from anxiety and depression scales (11–15), more blacks than whites scored in the upper levels: high anxiety, 32 percent blacks and 22.5 percent whites; high depression, 29 percent blacks and 17 percent whites.

On the Leighton Twenty-Question Health Opinion Survey (16), 25 percent of the blacks, compared to 15 percent of the whites, scored above the cutting score for "possible cases."

There were no differences between the races on the following additional interview items: fear of nervous breakdown, feeling low and hopeless, nervousness, extreme restlessness, feelings of weakness, feeling frightened without knowing why, suicidal thoughts, and use of tranquilizers and sleeping pills. Only three items showed racial differences: hallucinations (blacks, 13 percent; whites, six percent) and feeling that people were trying to pick quarrels (blacks, 22 percent; whites, 14 percent) were more frequent in blacks than whites, but a larger percentage of whites (20 percent) admitted to excessive drinking than did blacks (11 percent).

Functioning

Major differences between the races were seen in reports on functioning. No differences were reported on the effects of emotional distress (e.g., worry) on work capacity. However, the blacks reported a greater number of days in the last year missed from work due to ill health; more often having to go easy on work because of poor health; not feeling healthy enough to do things more often; and that there were many times when they couldn't take care of things. In contrast, more whites reported curtailment of social activities because of mental problems (e.g., worry or fear of having a nervous breakdown).

Interpersonal Relations

More blacks reported that they had frequent contacts with extended family than did whites, and more blacks expressed satisfaction with these contacts. More of the whites indicated that they saw relatives infrequently; also, many whites were satisfied with such limited contact. On a three-point scale (seeing friends daily, sometimes, or rarely) almost equal percentages of blacks and whites reported daily contact, but a larger percentage of blacks than whites indicated that they saw friends rarely. When the respondents were asked whether mental symptoms such as worry or fear of a nervous breakdown produced problems with their families, more whites than blacks responded affirmatively.

Satisfaction and Aspiration

More blacks expressed satisfaction with their places of residence than did whites, and more blacks expressed dissatisfactions with their marital situations. There were no racial differences regarding satisfaction with present job. When asked, "If you could have any type of job you wished, what would you choose?" over 50 percent of the blacks selected service or similar types of occupations, probably reflecting both a low and reasonable level of aspiration, consistent with present educational and social opportunities. On this index the white sample viewed themselves as more upwardly mobile. But when asked, "How does the future look to you?" there were no significant racial differences.

The Cantril ladder (17) was administered to about one-

half of the respondents, each of whom was asked to locate his position in life on one of ten rungs in terms of the present, five years ago, and five years in the future. More of the blacks located themselves on the lower rungs five years ago and at present, but almost equal percentages of blacks and whites positioned themselves on the upper rungs five years from now.

DISCUSSION

One of the major problems with prevalence studies of mental disorders (other than psychosis) concerns the appropriateness of the criteria for evaluating the presence of mental disorders and the applicability of any one set of criteria to persons of different races or diverse sociocultural backgrounds. In our four components of social psychiatric impairment, some racial differences were observed. Consistent with the finding that more blacks were impaired, larger percentages scored higher than the whites on standardized scales. The minor differences between the races on some symptom items in the interview schedule can be attributed to cultural patterns, as can some of the greater differences on interpersonal relations. In terms of functioning, the most striking racial difference pertained to the deleterious influence of poor health on the blacks' work capacity. We suggest that the larger number of blacks expressing satisfaction with most aspects of life may reflect an acquiescent response set or a tendency toward replying with socially desirable answers—a style of responding indicative of the continuing influence of the caste system.

The finding that a substantially higher percentage of blacks (38 percent) than whites (28 percent) were impaired points to the magnitude of the health problems among black people in this southern community. Extensive illness of various types is prevalent among blacks. For example, our additional ratings for severity of *physical* illness showed that 64 percent of the blacks had definite physical illness, compared to 32 percent of the whites.

The applicability of our criteria of social psychiatric impairment to blacks in this community, and possibly the rating process itself, may be influenced by three major factors. First, impairment ratings may be confounded by the influence of physical illness prevalent in our black sample. Second, some differential cultural patterns are observable, but these appear to be shifting, concurrent with rapid social change. Third, acquiescent response sets and a tendency to give socially desirable answers are bound to be influential.

In view of these problems, we are undertaking further investigations to differentiate the effects of physical illness from social psychiatric impairment: The physical health status of 200 of our respondents is being evaluated by the Polyphasic Health Screening Center. Also, cultural differences and response sets are being assessed in follow-up studies.

An analysis of the rates for social psychiatric impairment in the races according to sex, age, educational level, and annual family income showed only a few major differences. Among the blacks, no sex differences in rates of impairment were found, but significantly fewer of the white men (19 percent) were rated impaired. A more striking difference was observed when the impairment rates were controlled for age. Over 50 percent of the blacks under the age of 30 (compared to 33 percent of the whites under 30) and 44 percent of the blacks over age 60 (compared to 28 percent of the whites over 60) were rated impaired.

Rates of impairment in both races were inversely related to educational level and annual family income. In both races almost one-half of those with less than a high school education and those with an income below $3,000 were rated as impaired, but rates declined to about 15 percent with higher income.

The physical and cultural deprivation associated with being poor and uneducated is apparent to anyone who travels through this county. The higher rates of social psychiatric impairment and poor physical health among the black population are directly related to poverty and little education. This correlation between lower social status and illness has been found consistently in other studies.

However, social structural relationships do not adequately account for the impairment rates—particularly the high rates of impairment among the young blacks in this county, which is in the midst of rapid social change. In a recent paper (18) McKinney and Bourque found that the rate of social change has been faster in the South than in the rest of the nation. Major regional differences, as measured by economic and social indices such as urbanization and occupational distribution, are rapidly disappearing.

We pointed out elsewhere (19) that the results of epidemiologic research must be viewed not only from a perspective of change but also with regard for the reciprocal influence of change. We think that one of the findings in this comparative black-white study highlights this point and has implications for increased understanding of the relationship between sociocultural processes and mental illness. Our results have consistently shown a curvilinear relationship between age and rates of social psychiatric impairment—higher among the younger and the older. Strikingly, 52 percent of the younger blacks were found to be impaired, compared to 33 percent of the whites. This is the single largest racial difference in any of our analyses for sex, age, education, and income. Furthermore, the high impairment rate among the younger blacks was not as directly related to low income as it was among the older group.

We think that the black young adult group have been exposed during their formative years to the sociocultural change that has taken place in the last two decades. As young people they witnessed the turbulence of America in the 1960s and participated in the struggles accompanying desegregation. But their opportunities for sharing in the life-styles and material benefits of the wider society displayed by the media were limited. At the same time, the protective traditional cultural patterns of the

southern black were being assailed on two fronts: subordinated and exploited by the dominant white society on the one hand and challenged and repudiated on the other by groups stressing an African heritage and Black Power and scorning the former accommodations to the caste system.

Some of the blacks, e.g., our younger age group, can be seen as experiencing conflict between competing sets of conditioned responses, such as parental restraints on assertion and aggression versus growing emphasis on pride in individuality and ethnicity. Such a situation produces cognitive dissonance and the dilemmas of the marginal man—a person caught between not only two different cultures but often many antagonistic cultures. "Spiritual instability, intensified self-consciousness, restlessness and malaise" were seen as characteristics of the marginal man by Stonequist (10).

We think that the rapid social change that has occurred in the Southeast is creating more and more marginal groups. In our major study of this county, which includes socio-anthropologic analyses of communities, we will continue to test possible relationships between social psychiatric impairment and marginality as well as the more conventional social structural relationships.

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Drug Abuse, Sexual Attitudes, Political Radicalization, and Religious Practices of College Seniors and Public School Teachers

BY SAMUEL JANUS, PH.D., AND BARBARA BESS, M.D.

The authors surveyed a group of 745 public school teachers and compared them with college seniors in regard to a number of topics of concern to society today. They found that the use of drugs was more widespread among teachers than expected and that there was a close similarity between college seniors and teachers under age 30 in all areas examined. The authors point out the need for more studies on the attitudes and practices of teachers and on the effects of these factors on teaching programs.

THIS STUDY was designed to investigate drug abuse and sexual attitudes as well as political radicalization and re-

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TABLE 1
*Subjects Who Reported Themselves as Drug Users**

Category	Number	Percent
College seniors	264	61
Male teachers		
30 or under	158	66
31–40	72	43
Over 40	94	19
Female teachers		
30 or under	264	54
31–40	85	41
Over 40	72	14

*"Drug users" excludes both those who have never used drugs and those who have tried drugs only once.

ligious practices among a group of public school teachers. One of our main purposes is to offer a tentative evaluation of the behavior and attitudes of public school teachers and to contrast their attitudes with the responses of a group of college seniors. The paper is designed to determine whether a "generation gap" exists in regard to these important areas of life-style.

Teachers represent the largest single group of professionals in this country and, while their influence on the developing minds of young people is tempered by the influences of home, church, and peer groups and by the attitudes of society, they nevertheless are very significant disseminators and developers of ideas and models for identification.

METHOD

The population surveyed consisted of a group of 745 urban public school teachers, composed of 421 women and 324 men. The comparison group of 264 college seniors was drawn from a group of 880 respondents in a parallel study of college students from a large eastern urban university. The socioeconomic backgrounds of both teachers and students was primarily middle class. All subjects participated on a voluntary basis.

A 74-item questionnaire was developed to gather information in the areas of drug abuse, sexual attitudes, political radicalization, and religious practices. Candor was facilitated by guaranteeing anonymity to the respondents. The questionnaires were administered by fellow teachers and college students whom we had trained.

RESULTS

The results are presented in tabular form and are discussed with some of their implications. We consider it

TABLE 2
Relative Popularity of Drugs as Reported by Heavy Drug Users: Preference in Percentages

		Male Teachers			Female Teachers		
Drug	College Seniors	30 or Under	31–40	Over 40	30 or Under	31–40	Over 40
Marijuana	99	99	99	99	99	99	99
Hashish	36	23	24	7	32	20	4
LSD	16	10	8	2	8	7	0
Depressants	13	16	17	10	14	21	18
Stimulants	24	21	32	5	18	38	25
Heroin	4	3	0	0	5	2	0
Cocaine	6	6	0	0	4	0	2
Peyote	9	7	0	0	11	0	0
Opium	3	3	3	0	4	2	1
Others	12	9	8	3	10	6	2

TABLE 3
Attitudes Toward Petting and Sexual Relations Within Engagement

		Male Teachers			Female Teachers		
Attitude	College Seniors	30 or Under	31–40	Over 40	30 or Under	31–40	Over 40
Strongly agree petting is acceptable if the woman feels strong affection for the man	60	89	85	52	59	44	54
Strongly agree sexual relations are permissible for an engaged couple	50	73	67	32	53	27	35

of great significance that, although there have been a number of studies dealing with students in these areas of research, there is virtually no related research dealing with teachers.

For the purposes of this study, drug abuse is defined as the repeated use of nonprescribed drugs and/or the illegal use of substances that affect the emotions, perception, and mentation of the individuals who use them.

As shown in table 1, drug abuse reached a fairly high level among college seniors and remained high among young teachers, those under 30 years of age. Our results clearly show that, far from being in the minority, well over half of the teachers under age 30 were involved in the "drug culture." While there was a drop in drug use in the group aged 31 to 40, there was no dramatic decline until the group of teachers over age 40 was reached. In general, the teacher population seems to be a reflection of the larger society in terms of drug abuse. There is apparently no generation gap between college seniors and young school teachers (see table 2).

While the general order of descending drug abuse was from men under 30, at the peak, to women over 40, at the base, there were several notable exceptions. The use of both stimulants and depressants increased from college seniors to the groups of teachers over 40. The only category in which women's drug use sharply exceeded that of men was among those over 40 who used stimulants, where women reported five times as much stimulant use as men. There are two possible explanations for this: 1) they may have begun taking stimulants to aid in weight reduction, or 2) they may use them to counter the frequent depressions found among this age group.

Sexual Attitudes

Responses to items on this topic were measured on a six-choice scale ranging from "strongly agree" at one end to "strongly disagree" at the other. In general, the mass media stress that the predominant societal attitude is in such a state of flux as to be considered a sexual revolution. These sources hint at more promiscuity and liberalization of sexual attitudes in the youth culture than in the adult population. The impact of age in the responses shown in tables 3 and 4 is obvious, but it is instructive to note the correlation between drug abuse and sexual attitudes shown in table 4, where the responses are broken down on the basis of drug use.

As one might expect in traditional middle-class America, men in all categories were more permissive in their sexual attitudes. What is surprising, however, is the fact that teachers, who although young represent an older group than college seniors, seem to be more sexually liberated. This seems to contradict the general feeling that the sexual revolution is predominantly a youth-centered movement. Note that from table 4 it is clear that liberalized sexual attitudes increase dramatically in the drug-oriented youth and teacher groups alike. It would be closer to the truth to say that there does not seem to be a revolution but rather an evolution toward liberal sexual attitudes, and that age and education are important factors in this regard.

Homosexual Behavior

Once viewed with repugnance by both educated and uneducated people, homosexual behavior is now rapidly gaining acceptance and respectability among the "think-

TABLE 5
Political Identification (in Percentages)

Group	Extreme Left 1	2	3	4	Extreme Right 5
College seniors					
Drug users	8	57	31	4	0
Non-drug users	0	16	65	12	7
Total	12	35	43	9	2
Male teachers					
30 or under	15	49	30	3	3
31–40	19	26	46	9	0
Over 40	5	43	11	7	34
Female teachers					
30 or under	15	21	47	14	3
31–40	8	16	38	33	5
Over 40	13	15	28	28	16

TABLE 4
Comparison of Attitudes Toward the Acceptability of Sexual Relations Outside of Marriage or Engagement, in Percentages

Category	College Seniors	Male Teachers 30 or Under	31–40	Over 40	Female Teachers 30 or Under	31–40	Over 40
Strongly agree							
Drug users	54	84	85	27	66	38	28
Non-drug users	22	44	45	13	24	12	18
Total	38	64	65	20	45	25	23
Strongly disagree							
Drug users	12	0	0	13	9	31	26
Non-drug users	30	0	0	23	17	55	46
Total	21	0	0	18	13	43	36

TABLE 6
Attendance at Religious Services (in Percentages)

Category	College Seniors	Male Teachers			Female Teachers		
		30 or Under	31–40	Over 40	30 or Under	31–40	Over 40
As a child:							
Once a week or more	44	41	32	47	38	40	54
More than once a month	15	20	4	14	13	10	4
Less than once a month	8	10	14	14	11	11	4
Rarely, if ever	33	29	50	25	38	39	38
Currently:							
Once a week or more	14	4	7	18	8	16	26
More than once a month	7	6	4	4	5	7	9
Less than once a month	12	9	10	8	9	9	5
Rarely, if ever	67	81	79	70	78	68	60

ing community." College students approved of permitting homosexual behavior between consenting adults by 48 percent, while teachers, combining all groups and ages, approved by 62 percent. It is important to note that this contrasts with the more traditional views of homosexual behavior, which are still held by lower socioeconomic groups.

Political Radicalization

Responses to questions in the area of political identification were arranged on a five-point scale in which 1 represented the extreme left wing and 5 represented the extreme right wing. Table 5 presents the subjects' stated political identification, with the students' group broken down to show the differences between those who do and those who do not use drugs.

While most subjects reported middle choices on the political scale, the factors tending toward identification with the right wing were increased age and nonuse of drugs. Conversely, those favoring identity with the left wing were youth and drug use. The shift in age is the more obvious if one notes the extremes, i.e., choices 1 and 5, in the various categories listed in table 5.

Religious Practices

Table 6 shows the dramatically sharp drop in the practice of any religious rituals in all groups; the decline was sharpest, however, among those who indicated the greatest level of drug use. The question of religious practice was posed as follows: "On the average I attend religious services: 1) once a week or more; 2) more than once a month but less than above; 3) I attend regularly, but less frequently than above; 4) I rarely, if ever, attend." This same question was posed in two ways, the first for childhood religious practices and the second for current practices.

Among college seniors who indicated substantial drug use we found that 87 percent rarely, if ever, attended religious services, while only seven percent attended weekly. In general, the practice of religion declined with increased education and declined sharply with identification with the political left wing and with the drug culture. The same trend was reflected in the religious practices of the teachers we surveyed and seems to indicate, as seen in table 6, that attendance at religious services also decreases with age.

DISCUSSION

It is evident that there are very close similarities in the extent of drug use, sexual attitudes, political radicalization, and religious practices among the college seniors and young teachers in our population. The pervasiveness of the values of the "drug culture," in all four areas studied, is also very obvious. There does not seem to be any generation gap between these students and our group of young teachers.

The involvement of this group of teachers with drugs is much larger than we would have expected. Even more surprising, considering the influence of teachers on youth, is the fact that there have been no studies that investigated the attitudes and practices of teachers in these important areas of life, especially in regard to drugs and sex. We emphasize here that we are describing the attitudes and behavior of the teachers themselves, but we have not yet studied the effect of these factors on teaching programs, or on young students in the elementary and secondary schools.

There are two major controversial issues in education today—sex education and drug abuse information in the classroom. Teachers' attitudes can have a major impact here. We are concerned with what should be taught in the classroom, but have paid little or no attention to the attitudes and characteristics of those who are teaching it. This area needs much further investigation. One can only speculate that the changing behavior and attitudes, of society and of teachers themselves, offer both positive and negative opportunities for investigation and teaching potential.

It seems to us that there is a great need for efforts to overcome the apparent lack of communication between teachers and society in general on these vital areas of life.

We need to evaluate the goals of education. For too long, teachers have been regarded as nonpersons and society has, with its aggressively "head-in-the-sand" attitude, created a sense of alienation in the educational community. We have sought here to show the need for an examination of the goals of education, especially higher education, as well as of the life-styles and attitudes of educators.

Implications of the Women's Liberation Movement for Psychotherapy

BY JOY K. RICE, PH.D., AND DAVID G. RICE, PH.D.

The authors examine the implications of the women's liberation movement for current psychotherapeutic theory and practice in terms of the antifeminine Freudian position, the predominance of male therapists, the concept of role unhappiness as psychopathological, and the threat to the therapist's social power. Consideration of role conflict in sociological terms instead of the intrapsychic rubric is especially emphasized. The authors also discuss related issues concerning the training of therapists and propose a model using male and female cotherapists.

CURRENT EFFORTS OF WOMEN to reexamine and redefine their personal, social, and sexual roles have important implications for many social institutions. The worlds of work, marriage, religion, and education have been scrutinized for their historical and contemporary contributions to the perpetuation of an inequitable system of sexual discrimination that penalizes women. It seems likely that few institutions will come through unscathed and unchanged as a result of this penetrating social analysis. We do not agree with many of the psychiatric and other critics of the women's movement who characterize it as a passing fad of upper-middle-class females or unmarried neurotics and assign it little impact (1).

In our experience, the appeal of women's liberation to a woman's sense of dignity and the possibility of enhanced self-esteem are very powerful attractants; indeed, the potential gain is often seen by many women as outweighing major initial risks, e.g., feelings of greater frustration with their lives, increased anger toward men, and the need for significant restructuring of their basic relationships with men. Although women might increasingly seek psychotherapy as one means of coping with conflictual role demands and expectations (2), at the same time certain tenets and stereotyped practices of therapy may produce a growing dissatisfaction with therapy as a conventional solution to personal conflict. To the extent that psychotherapy represents a social institution, it too must be carefully examined in regard to its views and attitudes toward women. The following aspects of traditional psychotherapeutic theory and practice seem to have important implications for women and their desired role changes.

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CRITIQUE OF PSYCHOTHERAPY

The Antifeminine Freudian Position

Since Freudian theory and practice represent one of the major bodies of psychotherapeutic knowledge, the effect of the Freudian viewpoint concerning female behavior is considerable. Without disputing the great contributions of Freud to contemporary psychiatry concerning (among other things) the nature of consciousness, the phenomena of repression, and the significance of dreams, it is clear that, as Robert Jay Lifton was quoted as saying, "Every great thinker has at least one blind spot; Freud's was women" (3). The classical psychoanalytic theory of sexuality is male oriented, and Freud's taxonomy labeled women as the "abnormal" sex. What is more significant, however, is how anatomical differences have been built by psychoanalytic theorists into a powerful system of psychological, moral, intellectual, and societal values that transcend mere physiology (4).

The many disparaging references to women that can be found in even a casual perusal of Freud's work are tribute to the complex system of sexual values and status erected by his appeal to biology. At various times, women were described by Freud as "less ethical, with less of a sense of justice, more envious, weaker in social interest, more vain, narcissistic, secretive, insincere, masochistic, passive, childlike and incomplete" (3). For Freud, they were clearly an enigma ("What do women want?"). The repu-

diation of clitoral orgasm as second-rate, in the recent work by Masters and Johnson (5), represents a dramatic demonstration of the basic male Freudian bias.

Present-day therapists, while vocalizing a more liberal stance, often betray similar underlying prejudice. Bettelheim said that "we must start with the realization that, as much as women want to be good scientists or engineers, they want first and foremost to be womanly companions of men and to be mothers" (6). Rheingold wrote: "Women are the fountainhead of nurturance. . . . When women grow up without dread of their biological functions and without subversion by feminist doctrine and therefore enter upon motherhood with a sense of fulfillment and altruistic sentiment, we shall attain the goal of a good life and a secure world in which to live it" (7, p. 714).

It is unlikely to be acknowledged by women who seek the help of the Freudian-oriented therapist that Freud's position was in a large part a product of Victorian, Viennese social thinking (3). Moreover, they may not know or believe that psychoanalytic theory could be flexible enough to permit insightful present-day therapists to modify and adapt Freud's views in accordance with more contemporary findings about feminine behavior. The wide dissemination of the view that therapy is "antifemale" (not an unrealistic public generalization of Freud's position) is likely to result in fewer women perceiving psychotherapy as an available resource for solving personal problems.

While the close banding together of women in groups to solve their own problems may be one solution, this does not seem likely to relieve many of the emotional problems of women that require the skill of a trained psychotherapist. A better alternative would be an emphasis on the modifiability of Freudian theory and a willingness of Freudian-oriented and other therapists to be open to a healthy redefinition of female sexuality and role behaviors in accordance with contemporary knowledge. This position will be expanded more fully in the sections that follow.

The Predominance of Male Therapists

The delay in recognition of the antifemale bias in much of traditional psychotherapy could well be related to the fact that, as in other professions (e.g., law, the ministry), a disproportionate majority of practitioners are male. Many of the women's rights organizations have questioned whether a male therapist can understand and accept a woman's innermost feelings and communicate such an acceptance in a way that facilitates personal growth. One is reminded of the argument of the blacks, who insist that true communication is possible only with other blacks. In their more candid moments, our male therapist colleagues confess to feelings of perplexity and inability to feel the same degree of understanding and predictability in regard to the behavior of many of their female patients as they do toward their male patients.

The perceived inability of male therapists to understand women is likely to be increased rather than diminished by the shifting role sets and expectations promulgated by the women's liberation movement. Women patients' sense of frustration is likely to be enlarged both as a result of personal changes in role expectation (2) and from a sense of distance and lack of understanding felt between themselves and men—male therapists included.

A common result of a woman's increased awareness as to her traditionally expected role and "place" in what she perceives as a male-dominated society is a sense of generalized hostility toward men. The male therapist is not likely to escape these feelings. Such awareness is likely to increase the customary perception of patients that they are at times being exploited by the therapist (for their money, for revealing their personal feelings, etc.). The traditional interpretation of such perceptions in terms of transference ("These are really feelings toward your father, brother, husband, etc., that you are now generalizing to me") may seem less and less a satisfactory explanation. Although the original prototypes of such emotional experiences were probably in the primary family setting, they have been perpetuated to varying degrees by the male-dominated social context in which the woman patient has lived. Since it is likely that male therapists (as a product of our society) share certain chauvinistic attitudes at present, part of a woman's greater feelings of hostility toward men, including her therapist, seem appropriate and justified. Such feelings should be honestly acknowledged and dealt with in the therapeutic relationship. In fact, it is in the therapy situation that a woman's generalized feelings of hostility toward men might be most appropriately expressed, accepted, and worked through.

Role Unhappiness as Psychopathological

The mental health professions have long been vulnerable to criticism that part of their role is to help individuals "fit into society." Although psychotherapists have often admired and nurtured individuality, they have remained cognizant of social norms and sexual stereotypes (8, 9). Much effort in therapy has been to help patients achieve a comfortable "fit" with these traditional behaviors. This seems a natural tendency as long as one's definition of normality relies on a statistical formulation, with behavior different from the majority labeled as "deviant" (9).

One result of this position is that a therapist may begin to look for signs of psychopathology when he sees a woman who expresses marked condemnation of traditional feminine role expectations. This phenomenon is accentuated in the general public, which is quick to label advocates of women's liberation as lesbians and believe that this deviant tendency (irrespective of whether it is true or not) "explains" their reason for questioning the traditional role of women. The problem is similar for anyone in the avant garde of a social movement; labeling such an individual as deviant "explains" why they are doing their "unnatural" thing. Labeling role conflict as psychopathological and interpreting it in intrapsychic terms underscores the basic failure of most therapists to appreciate the social context that forces a subtle

"schizophrenia of person" for a woman. The latter is perpetuated by a variety of forces:

1. The traditional role we prescribe for a female is maternal and sexual (10, 11); the role of another's identity: "I am _____'s mother; I am _____'s wife; I exist because I am needed by someone else who is real." When children grow up, the mother is again no one. Even the pretense of real identity is lost.

2. The feminine housewife role glorified by the media and society is more than unrealistic, it is a hoax. The irrelevance, futility, repetitiveness, and goallessness of most day-to-day activities presently associated with being wife and mother are simply not recognized.

3. Most of the highest rewards within our society are held out for the achievement roles, the path traditionally associated with men. The movers, the innovators, and the creators are the ones who are esteemed (12). Thus, while the role of mother is given much sanctity in our society, a woman is given virtually no formal preparation for taking care of children. Indeed, the job of child-care worker is put at such a low premium in American culture that we assign it no professional status and ignore the fact that we are the only large industrialized country in the world without a public program of child-care facilities (13).

4. The temptation to be an *object* rather than a *person* is strongly reinforced by a consumer society that commonly assigns a predominantly erotic role to a woman. The concomitants of the cult of beauty and youth are that if a woman cannot attract a man, she is nothing. Not only are others' evaluations of self given highest priority, but internalized selfhood is ignored and the status of object rather than person is further glorified. Consumption of other objects becomes a substitute for identity and for relationships (14, 15).

5. A woman's self-image is deeply affected by societal programming of double-binding behaviors that tell her to be sexy, yet a virgin; strong, yet weak; subordinate, yet challenging (16); smart enough to get a man, yet needing to hide her intelligence (17); to achieve in school, yet to "fail" in the world of work (18).

6. The devaluation of the personal characteristics and qualities associated with being a woman has been well documented (8, 9). It seems obvious from this conditioning that the masculine stereotype might appeal to a woman as a more valued mode of living and that empirical studies consistently find femininity in females associated with poor adjustment (19). Such women frequently go to therapists with complaints of low self-esteem, chronic depression, and lack of identity (20).

These points have documented the schism that American culture forces upon a woman: She is overtly told to love herself and her role, yet covertly taught to hate herself and her sex. The stereotyped, intrapsychic interpretation of such self-abnegation without full cognizance of the societal influences that perpetuate the conflict not only represents a narrow approach, but can also be a destructive reinforcement of the status quo by the therapist.

We suggest that a careful questioning of role is a healthy, rather than a pathological, process for a woman or for a man. (We have attempted to document the kind of role stereotypes that force a schism for women, but men are equally victimized, as elaborated by Brenton [21].) Such role examination would lead, we hope, to greater ultimate happiness and self-satisfaction and not to a lasting feeling of abnormality. In fact, if there were a healthy societal acceptance of role questioning and the concept of flexible role change, the process would occasion little anxiety and turmoil. Many women would then not consider psychotherapy as a response to the feeling "Something must be wrong with me." Until society adjusts to this idea, however, many women will continue to feel that the desire to change the expectations and patterning of their lives is an indication of personal problems. In response, therapists will continue to prescribe love as a substitute for action (22), and interpret the search for identity as a running away from closeness (1).

A more fruitful therapeutic course would be to help a woman question, probe, and recognize the historical, environmental, familial, and societal antecedents that can often precipitate and perpetuate feminine conflicts; aid her with the restructuring process necessary in her primary and personal relationships, especially her marriage; provide a place where feelings toward men and about women who stand for the traditional feminine role patterns can be ventilated and explored; and assist her in exploring new roles and models.

Recent papers by Mitchell, Rossi, Brown, and others (23) have put forward varied alternatives to the family that include the legitimization of a number of different forms for intersexual and intergenerational bonding; the promotion of part-time work for both men and women; the acceptance of the legal legitimacy of all children born, regardless of the marital status of their parents; equal division of all tasks within the family; and free birth control, abortion, and 24-hour child care. A bill that would provide for a three-year renewable marriage contract has been introduced into one state's legislature. Egalitarian marriage or union in which both husband and wife maintain careers that carry equal importance and an equitable division of labor determined by preference or agreement is becoming more than a utopian anomaly in American life (24).

The reaction to these proposals and innovations has been less than favorable among many mental health professionals; it has even been hostile. Some see the difference between the two sexes as disappearing at an alarming rate and conclude that many societal ailments stem specifically from the lack of clear sexual roles (25, 26). Even as eminent an author as Erikson insisted on the stereotyped precept of womanly fulfillment: A woman "harbors an 'inner space' destined to bear the offspring of chosen men and with it, a biological, psychological and ethical commitment to take care of human infancy" (27). This view can be seen in actual practice in Boston, where women are denied entrance to a mental health training program if they work full-time or have a preschool child (1). And the president-elect of the American Academy of General Practice, addressing the Wisconsin division, was quoted as asserting that a woman is preferable as a physician's aide because she is more obedient and is

taught to be subservient to doctors: "This role is suited to a woman" (28).

Such dogmatic pronouncements of women's "true nature," and the lack of acceptance of possible major changes in marital, familial, and sexual behavior and patterning, are likely to result in many therapists being seen as inhibiting and condemning rather than freeing by many women patients. To remedy this, the therapist (who may be more cathected and involved in the traditional system) must be carefully and honestly attuned to his own feelings. He must not only become knowledgeable about the process of his own social conditioning, which influences his attitudes and beliefs, but he must also become cognizant of the inherent social or personal gains he may accrue in resisting change.

Threat to the Therapist's Social Power

The demand of women for equality as individuals can form a distinct threat to the therapist's sense of social power. Because of the nature of the therapy situation, it is very easy for the patient, in the role of supplicant, to feel "one down" in power to the therapist. In some instances the elevation of the therapist (as the key person who can provide the answers to troubling problems) is valuable in that it reinforces the therapist's sense of self-worth and helps sustain his or her motivation for what may be an arduous and painfully slow process of human growth. However, a woman seeking feelings of sexual equality and experiencing the conflictual urges of newly aspired role freedom does not easily accept the conventional power structure of psychotherapy. Therapists are likely to feel on trial early in the therapeutic relationship, and their mettle is tested as to whether they truly believe in and can permit a relationship of equals.

For a therapist accustomed to the traditional male and female psychotherapeutic role patterns, this can be a jarring process. Labeling verbal aggressiveness as "masculine striving" or "transference resistance" may simply serve to reinforce the male therapist's own power position, and such interpretations might fall on deaf ears. At this point many women patients could feel that the therapist has little to offer that is different from traditional answers and could well leave therapy.

The traditional blank-screen, silent approach favored in the analytic therapeutic mode is particularly conducive to fostering regression, dependency, and distortion; it often serves as well to maintain the inscrutability and superiority of the therapist. While there are advantages to this approach—e.g., in breaking down defenses—unfortunately the concomitant result is often to reinforce the neurotic behavior patterns that distress many women, namely the passive infantile mode, reluctance to action, and the preference for the "irrational" approach.

To cite another example, the client-centered approach, which emphasizes a nonjudgmental, unconditional acceptance of the individual, can crucially fail the woman who comes to therapy goalless, indecisive, lacking identity, inspiration, or simply the information needed to search out new personal modes or solutions, We see the therapist as a knowledgeable, active participant in the therapeutic process, and his or her training and experience need to reflect these new values and emerging societal trends.

IMPLICATIONS FOR TRAINING

Discussion of the possible effects of the women's movement on traditional psychotherapy leads us to a consideration of several issues and implications for the training of therapists. Specifically, we see the need to train therapists to fill a greater number of roles:

1. As experts on the growing body of research into sex differences and the psychology of women. There is much recent literature and empirical work on the psychology of women, changing sex roles, and established sex differences and how these differ from the myths in this area. Other writings document the effects of sexual discrimination, its cultural and societal antecedents, and the need for change (29, 30). Most contemporary therapists have little formal knowledge of these findings, and few current mental health training programs give their students instruction in this increasingly important field. Moreover, therapists get little practical experience (other than from their spouses) in exploring these areas from a feeling standpoint. We urge that didactic courses dealing with the psychology of women be established as a core part of psychotherapy training programs. Moreover, sensitivity training groups of men and women structured to explore sexual role patterns and expectations and to evaluate personal sex role bias would appear to be a valuable training device, both for experienced and novice therapists.

2. As open proponents of alternative life-styles and sex roles. Therapists may make more errors of omission than commission; the strong emphasis on listening and analyzing and the reluctance to provide direction for fear of imposing values may promote little impetus for patient change. Many therapists tend to be passive when confronted with social issues requiring innovation or change. It is much easier and more comfortable to silently support the status quo under the guise of neutrality than to encourage "deviance." Yet the active supporting of "deviance" may be precisely what is needed to effect a more healthy behavioral pattern and social identity for today's woman.

How many therapists would explore the role of a single parent or a single career woman, would suggest an occupation or life role that could conflict with a marital role or inconvenience a husband, or would be prepared to discuss honestly the ambivalence and schism in traditionally defined sex roles? Furthermore, in contemplating alternatives to these roles, few people, including therapists, would consider anything other than an achievement model for a meaningful possibility. Yet the socialization of men into the achievement model is as narrow a perspective as the socialization of women into the maternal one, and the extraordinarily widespread dissatisfaction of men who at age 35 or 40 have achieved their original goal(s) of fame, affluence, or status is poignant testimony to the futility of rigid adherence to a single model.

We suggest not only that the therapist must be prepared to discuss these issues, but that he also may have to take the initiative. Consider that a type of patient frequently seen in private practice is the fortyish, depressed, passive woman who exhibits a general frustration, boredom, and masked anger. She is not likely to be the female activist who has questioned her role and has already embarked on a course of action (the activist is more likely to be angry than depressed and to be vocal in her analysis instead of aimless and articulate in her complaints). The therapist who plays out parental socialization practices by a continuing pattern of protectiveness may be of minimal help to these female patients. Women need to be confronted when they harbor unrealistic visions of the traditional role, must be encouraged to explore the nebulous routes to self-esteem, and even "kicked out" of the womb in order to experience successes and failures in a real competitive world.

3. As community agents of social change. In terms of the numbers of individuals that one could help, or the influence for social good that one could effect, sitting in an office doing psychotherapy will perhaps never accomplish what getting out of the office might. Working in caucuses, lobbying for legislative change, educating the community, and working with influential groups and with lay groups are likely to be where the ways and means of change lie. Young professionals in a variety of fields are choosing this route increasingly. Lawyers seek the ghetto, new M.D.s bombard the American Medical Association for social reform, abortion, and health care, and clergymen become "politicians" in recognition that the ivory tower of the office is not "where it's at." Aiding a handful of individuals to paths of greater self-esteem and personal fulfillment within one's lifetime can of course be personally rewarding and meaningful, but if our goal is to achieve a truly egalitarian society, we must do more. The provision of community, consultative, and political experiences for trainees is one solution; yet, more importantly, our training programs must reflect the recognition of the therapist as an agent of social change.

Also, there is an obvious need to train more women therapists. At present about 11 percent of the American Psychiatric Association and about 25 percent of the American Psychological Association membership is female. Encouraging more women to enter the mental health fields at the higher professional levels will require reaching them through high school counseling programs, education of the parents and teachers who influence career choice, active recruitment of female trainees within professional schools, and adoption of more flexible admission policies.

Advantages of pairing a female therapist with a female patient struggling with conflictual role demands in a changing society include a greater sensitivity to issues and an ability to empathize with feelings; the provision of a role identification model; and the offer of potentially important solutions that may stem from the therapist's own personal experience. The woman therapist could also effect change in male patients by directly confronting chauvinism and sexual stereotypes within the immediate relationship. These advantages depend on the attitudes of the female therapist for, as is apparent from the literature cited, many female professionals support the status quo as vehemently as do some of their male colleagues. However, even if there were some magic way to equalize the number of male and female therapists available, until present sex typing and biases are changed, research evidence seems to document that male therapists are likely to still be preferred over female therapists by both sexes (31, 32).

ALTERNATIVES TO TRADITIONAL TREATMENT METHODS

The increased use of couple or group therapy with male and female cotherapists seems a ready solution to many of the critical issues discussed in this paper. Such a therapeutic arrangement allows for a full and open exploring of feelings related to changing sexual role behaviors in the presence of an "ally" (a sympathetic therapist of the same sex). The success of this procedure depends on the two therapists' awareness of and comfort in dealing with each other and with the issues for the therapist raised in this paper.

The greatest impact of the feminist movement as related to psychotherapy seems likely to be felt by the younger married women. Such individuals have made certain choices in the direction of traditional feminine role values but do not feel their life pattern to be set in a way that prohibits reevaluation and change. Such women seem prime recipients of the conflict engendered over changing feminine role demands and expectations (2). The results of this self-exploration process are likely to demand a major restructuring of the marital relationship. The male and female cotherapist treatment model proposed would seem especially appropriate for such cases, with both husband and wife seen together.

However, psychotherapy per se, despite its context, may not be the solution for many cases. Therapists must be prepared to recognize and even to suggest other more viable alternatives to psychotherapy when appropriate. A woman with role conflict might well make more progress in a consciousness-raising group of other women, and would benefit by a referral to helpful agencies or individuals. Such groups essentially function as encounter or sensitivity groups. Being a woman is given positive support, models to follow are provided, and attempting more effective role behaviors is encouraged. Guilt may be dramatically reduced as a woman comes to realize in such a group that her "personal" problem is in part a societal one.

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Black Liberation, Women's Liberation

BY ANDREW E. SLABY, M.D., AND JOAN R. SEALY, M.D.

The authors interviewed 74 randomly selected college students in an attempt to determine reasons for black women's lack of involvement in the women's liberation movement. Black female students showed a great concern with blackness and its implications but less concern than their white counterparts about integrating vocational interests with their concept of their sex role. It was noted that the black students' fathers were often of lower occupational, educational, and social status than their mothers. The possible implications of these findings are discussed.

THERE HAS BEEN a conspicuous absence of any significant involvement by black women in the women's liberation movement. This seems somewhat ironic since the rhetoric of the movement often includes allusions to the concept of the "woman as nigger," suggesting that a woman's plight in America is somewhat similar to that of blacks. The question of liberation as women somehow does not appear to be relevant to black women now or, if it is relevant, seems of less importance than their liberation as blacks.

At first glance the lack of affiliation between the two ostensible minority groups might seem incongruent with the observations of some (e.g., some women liberationists) that the two are sister victims of a predominantly white patriarchal social system. Yet comparisons be-

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The authors wish to thank Dr. Kenneth Keniston, Professor of Psychiatry (Psychology), Yale University, for his helpful criticism and Ms. Jane Keane for her assistance in the preparation of this manuscript.

tween the two movements are increasingly coming under criticism. It is true that blacks and women not infrequently encounter comparable employment difficulties when presenting credentials, skills, and experience equivalent to or greater than those of white male applicants. However, American women are generally not segregated from the so-called oppressive male subculture while growing up, and in addition, women form approximately 51 percent of the population, while blacks constitute only 11 percent (1).

Other clear differences between the two subcultures often overlooked by overzealous advocates of a union between the two movements have been discussed by women such as Anne Osborne of the Southern Christian Leadership Conference in Atlanta, Ga. Reflecting on the apparent reluctance of black women to participate in the liberation movement, she explained that black women are "just beginning to get the kind of good treatment as women that white women have always had. They don't want to give it up too fast. Black men have just gotten enough money to take them to nice places, and women like it" (2).

The literature on the women's liberation movement provides other suggestions for a basis of distinction between the two egalitarian movements. Kate Millett has contended that, given a patriarchal society, women are taken less seriously than men intellectually, are seen primarily as sexual objects, and are deemed less powerful in the marital contract (3). However, it is not clear that these points are as applicable to the black subculture as to the white. Billingsley, for instance, has said that there is a stronger tendency toward mutual aid in black family life as a consequence of the black subculture's subordinate position in the largely white American society (4). If this indeed is so, then it would not seem surprising that most black women reject a major concern for liberation as women at present and instead devote their energies to the more general liberation of the black people.

Other factors possibly contributing to the general absence of blacks in the rank and file of the women's liberation movement emerged during interviews of 74 students who entered Yale College in September 1970. These students have been interviewed serially during their freshman year and again during their sophomore year in an attempt to identify psychosocial origins of student commitment and alienation in the early 1970s. All of these randomly chosen students consented to be in the study and have remained in it. There are 32 blacks and 29 women in the group.

BLACK IDENTITY

It is striking that, when talking with black women, one repeatedly hears allusions to blackness, but none to involvement with women's liberation. Interviews are replete with references to the subjects' own blackness and their concern for their black "sisters" and "brothers." For instance, one black woman, when asked what she expected to be doing 20 years from now, stated, "I'd like to be involved in the black community and feel 20 years from now I will be." The sincerity of her response was evidenced by her present involvement as an officer in a black organization on campus. Another black student, when asked about the role of politics in her life, expressed concern for black youths looking for easy solutions to racial problems: "I'd like to be an activist, but I'm disgusted with the way things are. I think it is the height of arrogance for college kids to call Americans this and that and racist and all. I'm more concerned with the black people."

Many felt that the concern with blackness contributed to the formation of all-black groups that interacted little with white students. Commenting on this phenomenon, one black student said, "Three-fourths of blacks will just stick around with blacks. Although they may occasionally be with white friends, they eat with blacks and also party with blacks, and if they take gut courses, they try to take them with blacks." Another black woman student gave a rationale for the formation of a separate subculture and also for the choice of Yale as a college by some black students. She said, "My friends are from the same ethnic background; it's less complicated . . . especially since not everyone believes in U.N.-type relationships. Some black students came to Yale explicitly to meet other black students who are achieving academically at the same level."

It would be misrepresentative to state that these young women were not concerned with the issues of womanhood, but they had no major concerns about the oppression of women. Attitudes toward women's liberation among black coeds ranged from that put forth by one who, when asked how she saw the concern for the environment and ecology, commented, "It's really a serious problem, but I think at the present people are jumping on the wagon because they have nothing better to do . . . and I think the same of women's liberation." Another was asked what she saw herself doing 20 years hence: in an open acknowledgment of "male chauvinism," she replied, "Living in New York or Paris . . . married, with two children . . . a free-lance architect . . . [and married to] someone with a formal education . . . through college at least . . . a male chauvinist who would let me work at home as long as I take care of the house and kids."

In addition to their relatively greater concern for blackness than for their role as women or "liberationists," these students generally were not overtly struggling with questions about the style of life they wanted to lead or with religious or philosophical issues. Major discussions centering around career choice were not found in the interviews of the black students as they were in many of the white students' interviews. In addition, the black students did not tend to define their primary goal in college as "vocational," as did many of the black students entering college in 1966 who were studied by Hedegard and Brown (5). The interviews with black students, when compared to those with white students, contained less reflection about the most appropriate role for a young intellectual in contemporary society and about the difficulty in formulating a consistent philosophy of life

TABLE 1
Comparison of Mother's and Father's Occupational Status for Black and White Students

Relative Occupational Status of Mother*	Black Students (N = 32)	White Students (N = 42)
Greater than father's	8	1
Equal to father's	9	13
Less than father's	15	28

*Occupations were ranked according to the seven positions on the modified scale used to calculate the occupational status for Hollingshead's Two-Factor Index of Social Position (6).

when many of the major premises on which much of their parents' lives were based were being queried.

In some ways it seemed, in fact, that the black students were made so acutely aware of their blackness that it could not help but be a major issue in their lives, for others would not have it less. One black woman, asked whether black students were confronted with any particular problems at Yale, stated that indeed they were:

> But it is hard to articulate them. That's all people talk about and some of the reasons given for problems with black students I don't agree with. Black students are more pressed by their peers to conform to a certain type. It is all outlined and you have no choice. Some teachers just love "niggers" and some grad students . . . very liberal students . . . who have read all the books on blacks. If you're not like they think you should be, you're a "Tom" or "white." And there are black students who want you to be like them. They go on like "you owe it to us, you're black and we're black." It's hard to be yourself.

She continued to elaborate on how many black students had never been in a predominantly white setting before and therefore did not "know how to act." She also spoke of classroom pressures: "If you're a black student, you don't speak for yourself but for all black students and what they are."

OCCUPATIONAL STATUS OF PARENTS

These vignettes and others too numerous to recount document the concern among these students with black issues, but they do not explain the absence of references to concern with their oppression as women. For a possible explanation of this we must look beyond their days at Yale to what they told us about their homelife. When one closely examines the childhood experiences of these young people, one finds that most of the white male and female students come from families in which there is a clear disparity between the occupational status of their fathers and mothers. While both parents may be seen as intelligent, sensitive, and well educated, the father clearly has attained a greater occupational status than the mother. Frequently their fathers are businessmen, lawyers, academicians, or physicians; their mothers often do not work outside the home, and if they do, they are usually employed in such traditional female positions as social workers, teachers, and nurses.

This disparity in occupational status and/or academic achievement is highlighted again and again. One student's father was described as:

> The son of Jewish Russian immigrants. They lived in Philadelphia and were very poor . . . and he had to work. He's probably the brightest person I know. I make the distinction because I don't think he's only smart. He went to high school there and then to Princeton and graduated Phi Beta Kappa and magna cum laude. He got an M.A. and Ph.D. in history at Harvard. He planned to teach history but then went to B.U. law school and now is a lawyer.

The same student's mother was described as: "From an upper-middle-class Jewish background. She went to Smith and back to Sarah Lawrence for teaching credits."

Although not all discrepancies in education are quite so remarkable, other students alluded to analogous situations. One coed whose father was an engineer-turned-teacher said, "My mother didn't go to college, but is going now. But without a college education she is one of the most brilliant people I have met."

Some white coeds seemed to associate certain types of achievement with their fathers. One girl, whose father had attended a prestigious college and had gone on to be a Rhodes Scholar at Oxford and whose mother had switched colleges to be with her future husband, reflected: "Part of my problem is that I am probably more like my mother . . . but I have certain traits of my father, too. My parents are very different, yet they come off quite well. My father is more practical and scientific; my mother is flamboyant."

Such perceptions of mothers as "flamboyant" or less practical than fathers were generally not found in interviews with black students, nor was there such a discrepancy in occupational status ($\chi^2 = 8.70$, $p < .025$) (see table 1).

In black families the occupational status of the mothers is not infrequently on a par with or greater than that of her husband. Mothers often work as teachers, nurses, and office clerks, while fathers frequently are mail carriers or servicemen or hold positions of comparable status. One black girl who never knew her laborer father, but whose mother holds a master's degree, described her parents thus:

> My mother and father were divorced when I was very small, and I grew up with mom and grandmom. Mother knows what she wants and how to get it; I admire her determination . . . the fact that she is a strong person. I have the feeling she would do anything for her kids if she had to. She is unselfish when it comes to us. My stepfather has been married to mom for ten years. I really don't know him; I never wanted to know him. He's not interested in other people. Mom is a social worker. She got her bachelor's degree from Howard and her master's degree from Atlanta University. My stepfather is a mail carrier who went to school in Memphis and had no college. My real father and mother divorced when I was two. He also grew up in Memphis.

Regardless of the relative status of their parents' occu-

pations, the black students usually described their mothers in terms suggesting a more practical and less flamboyant status than did their white counterparts. One whose father was a physician and whose mother was a social worker described her father as "very quiet ... fairly easygoing but underneath always thinking ... he's not one to initiate an argument ... not heavy-handed. He loves his kids and out-of-doors. Inwardly my father has many aspirations for me because my brother didn't finish college and my father is hurt."

But she described her mother as "very dominant and outwardly strong ... she can't hold anything in. She has fantastic wishes and hopes for both her kids ... she's dominant!"

Another student, whose parents had not lived together since she was six years old, had a father who was a mail carrier and a mother who was employed as an executive secretary. Her description of her parents was nearly the reverse of that given by the girl whose father had been a Rhodes Scholar:

> My father is really intelligent but also uneducated. He gives me all the luxury items; my mother gives me all the necessities. My mother paid for private school. I'm like my mother in my academic orientation. And I'm easygoing like my father ... money is a thing to spend. My mother has a bachelor's degree and further credits; my father finished fourth or fifth grade.

SOCIAL STATUS OF PARENTS

Although there were some families in which a black woman's father was a professional and her mother a housewife, we encountered this much less frequently than among the white coeds. In fact, not only was there a significant difference between the relative occupational status of black and white students' parents, but, in addition, if the social class of the fathers and those mothers who are employed is calculated, one discovers by comparison a statistically significant difference in the distribution in the two groups ($\chi^2=7.13$, $p<.05$) (see table 2). Black students' mothers, more frequently than their white counterparts', hold occupations of greater status than those of their husbands. Also, and not surprisingly, when calculating their social class (which combines both education and occupation), we find that they occupy positions that are more often equal to or greater than those of their husbands.

Is it any wonder, then, that the black coeds were less concerned with being emancipated from subservient occupations when they grew up in a culture in which the female identity models and predominant social ethic were such that a woman would work and, moreover, work in occupations with status, in the eyes of the black subculture (or white subculture for that matter), equal to or greater than their husbands'? It cannot be definitely stated from this study that roots of such female achievement lie in the fact that black women sought careers such as teaching to give them economic freedom and protection from the sexual exploitation that they might have suffered as domestics for whites, as Grier and Cobbs (7) have suggested. However, our study does confirm their observation that black women have sought careers in such areas.

TABLE 2

Comparison of Mother's and Father's Social Class for Black and White Students

Social Class of Mother*	Black Students (N = 24)	White Students (N = 28)
Greater than father's	9	2
Equal to father's	7	12
Less than father's	8	14

*Social class was measured by Hollingshead's Two-Factor Index of Social Position (6), in which occupation and number of years of school completed are scored on the appropriate occupational and educational scales.

The stereotypical Jewish immigrant families often encouraged their sons to pursue careers in medicine or law for economic security in the New World. Unlike them, black families forced into a status somewhat resembling that of immigrants in the dominant white subculture have often encouraged their women, either overtly or covertly, to pursue careers that could afford economic security in their adult years in a society in which educational and employment opportunities were greater for black women than for black men.

DISCUSSION

Given, then, the fact that black female students are unlike their white counterparts, who as adults may be pursuing roles discordant with the predominant cultural ethic of their youth and in some ways antithetical to that of their predominant identity models (their mothers), one would anticipate that this would be less of a concern in adolescence and early adulthood for an intelligent black woman than her blackness. Most of these students are upwardly mobile and aspire to high-status occupations. Yet they cannot discount the fact that for years most of them grew up in a subculture predominantly consisting of people relegated by limited educational and occupational opportunities to a Class V or at best Class IV position. The same black female models who were on a par with their husbands occupationally were generally perceived as somewhat inferior by the predominant white subculture because of their blackness.

One could postulate—and, indeed, it would seem worthy of study—that blacks in some African nations who grew up in a predominantly black culture would be as unlikely to mention "blackness" in such interviews as whites are to mention "whiteness" or concerns for the "white community" or "white power." Furthermore, should such an all-black society be of a patriarchal nature with greater educational and occupational opportunities for men than for women and with a discrepancy between men and women in occupational status, as in the white American culture, one could postulate that some-

day in its history, too, cries of sexism would arise and a movement would form to liberate the women of that society.

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Functions of the Lower-Class Partial Family

BY PAUL L. ADAMS, M.D.

Six million children in the United States experience the partial (fatherless) family. This type of family, which appears frequently in lower-class areas, somehow functions as a viable form. It is not a congenial structure for understanding by means of the classic psychoanalytic model or other "deficit" models. A "difference" model is proposed for understanding the lower-class partial family's functions regarding sexuality, economic life chances, authority, and honor. It is poverty combined with fatherlessness that accounts for the differences and, perhaps, the deficits.

PLANNERS AND POLICY MAKERS often look away, in every possible direction, from troubled families. Even revolutionaries who wish to push for a radical reconstruction of social institutions seem to have a preference for singling out economic and political institutions or educational institutions, as if the revolutions made by schoolmasters had been any more successful than other revolutions. The way that women and children live is accorded second place by most of the major theorists in the field of social policy. As a result, there have been few advocates of the rights of women and children or even of the welfare of familial units in which women and children are always the prime participants. Policy makers emphasize economic and political institutions, while making the assumption that the family stands (in some fashion or other) as an immutable structure that needs none of the guidance of the enlightened social engineer. My thesis is that family living might well be the focal point of the social planning of human services.

A truism holds that the basic biosocial unit is the nuclear family, consisting of a wife-mother, a husband-father, and their offspring. In one form or another the nuclear family, or perhaps more accurately termed the conjugal nuclear family, in which the husband-wife relationship is focal, is generally thought to be almost universal and irreducible as a kinship group. However, by 1960 only one-half of all families in the United States were composed of married couples who lived in a household with their own children (under age 18), without anybody else in the household (1). William J. Goode (2) has stated that the conjugal family contains a nuclear family, but with some added foci that place the conjugal family in an intermediate zone between a simple nuclear family and an extended family. The conjugal family (not the nuclear family) is the typical family form in industrial areas of the world, and most conjugal families are not as completely isolated from extended kinship ties to relatives-in-law and grandparents as would be called for by the strict nuclear family concept. In its pure form, therefore, the nuclear family certainly is *not* the universal family type in North America, even though it is the ideal type used as the conceptual model in most psychiatric discussions.

Urbanized and bureaucratized societies with prominent class divisions, such as the United States, exhibit a growing form of family that represents an incomplete or partial configuration of the conjugal family. In this type of family the mother-child relationship—not the husband-wife relationship—is the focal point. The partial family is characterized by the absence of a father as a permanent member of the household. It is a common form of broken family. It includes, in short, less than a conjugal nuclear family. It does include the mother and her offspring and perhaps some features of the extended

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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family because of the presence of other relatives, notably the maternal grandmother. Also, affinal relations may be more vital and more extensive in partial families than in complete families.

This is the lower-class partial family (3) or the "denuded family" (4). It evidently possesses a remarkable durability in spite of its association with poverty and neglect. Worldwide, it is more common among members of the lowest income class than among people in other strata. It is the modality in which at least six million American children are being reared (5). It assuredly accomplishes some of the goals and purposes of the complete conjugal family. The partial family of the lower class deserves to be studied more fully as a viable form that functions for both individual persons and society.

COMPLETE AND PARTIAL FAMILIES COMPARED

The natural history of the complete conjugal family differs from that of the partial family. The former typically evolves out of the marital pair (sometimes called a truncated family), for that pair becomes a complete conjugal family only through the appearance of offspring. The truncated family (marriage pair) itself subserves important functions that vary from society to society and also among subsystems within a larger society. It is sexual activity that produces and distinguishes the conjugal family, and when the conjugal family is complete (not merely truncated or partial), it remains a structure promoting a high degree of sexual activity—particularly for adults.

The partial family, on the other hand, apparently develops by any of several distinct pathways.

1. It may develop unheralded, so to speak, when an unwed female gives birth to a baby whom she keeps and rears, without ever stably cohabiting with an adult male. More accurately, in the United States, it is often the maternal grandmother who rears this child.
2. The partial family may develop as a willful breakdown product whenever a conjugal family is rent by divorce, desertion, separation, or annulment.
3. It may emerge from the unwilled absence of one of the spouses. Death, imprisonment, military conscription, and economic catastrophes have all taken their toll from complete conjugal families in our epoch, converting them into partial families.

All three of these circumstances are most common among the lower classes; and it could be said that the manifest problems arising for partial families are, by and large, inseparable from the lower-class position of the family members.

Lower "classness" and familial "partialness" are mutually interacting functions in social pathology (6). Impoverished blacks in the United States exemplify the interaction of class and family form quite lucidly and directly. (I use lower-class blacks as an extreme example; obviously, all blacks are not poor and all poor blacks do not live in fatherless households.) Our racist society is so constructed that the family patterns of the blacks are conspicuous, creating especially for lower-class blacks a high prevalence of familial disorganization, dissolved marriages, and children born out of wedlock. Moynihan (7), whatever his biases, has documented the perilous statistical probabilities: One in four urban black marriages is dissolved; one in four of all black births is recorded as illegitimate.

Blacks, subjected to dual exploitation by racism and poverty, are the most mobile segment of the U.S. population. It is the old story, learned in slavery, of the disinherited being considered easily expendable, easily uprooted, and highly mobile, and then sometimes denounced as action oriented. The societal approach to their blackness, by compounding their poverty, compounds their movability and places the black family unit, because it is not as mobile as the black individual, at even greater risk. Individuals and family fragments are always more easily movable than complete conjugal families. Hence, it is intrinsic to our North American societal structure that it promotes the growth of the partial family among blacks and fosters their corresponding receipt of public welfare funds. This mode of societal production of cyclical neglect continues, however unsound a partial family might be from a sociopsychiatric standpoint (8) and regardless of the many researches that show that adequate family welfare systems can prevent and alleviate social pathology.

FUNCTIONS SUBSERVED BY THE PARTIAL FAMILY

Psychiatric consensus holds, by and large, that the partial family functions defectively in five respects: biologic maintenance, social control, enculturation of children and youth, status placement, and emotional maintenance. Although most births the world over are still classified as legitimate, it is only in reproduction that the partial family is held to function as effectively as the complete family, since marriage is not regarded as a prerequisite for procreation.

In spite of its being decried, the partial family does function. It does persist, and it is condoned by society. All these facts lend credence to the view that men who derogate it perhaps do so only because it is a family in which women are not ruled by men. A strong case could be made for the viewpoint that the partial family, *if it is not poor*, functions quite fully for everything that a complete family does—biologic maintenance, social control, enculturation of children, status placement, and emotional maintenance, as well as reproduction.

Many discussions of the partial family in the United States are highly charged with political sentiments (9). Some progressives who fear being anti-black place themselves in the ludicrous position of defending the partial family so fully that they end up praising it and contending that members of partial families do not need any special assistance. Conservatives, on the other hand, are in the position of arguing that the partial family is patently debased and inevitably pathologic, but they contend that it must not be coddled and that it warrants no

special assistance programs. Equally, then, neither the progressive nor the conservative described becomes an advocate for needy black families. Political neglect is an outgrowth of both ideologies.

SOME ACTUAL DIFFERENCES

A partial family does differ from a complete conjugal family in at least four important ways. It is sexually, economically, politically, and honorarily unlike the complete family unit. If these differences are, by comparison, also deficiencies, they are by no means insurmountable deficiencies.

Sexual Differences

A partial family is sexually different from a complete conjugal family. The latter requires a more or less durable relatedness between adult female, adult male, and child, whereas the partial family includes only one parent. Hence, by definition a stable conjugal relationship is missing. Sexual opportunity and sexual rights and responsibilities are all impaired or jeopardized in the partial family. In a "matrifocal" fatherless family the chances are lessened for children to establish their identities with respect to a valued father (10). Stated differently, the "matriarch" of a partial family might assertively disvalue males. She "puts down" the male, the penis, copulation, male lust, and all facets of maleness. Proponents of the familiar contend that the mother alone cannot train boys for their subsequent fatherhood (4, 11), and their contention is reinforced by every instance of partialness that is compounded by poverty. The forecast contains its own fulfillment vehicle. Also, it diminishes what mothers alone can teach about maleness and what children can learn on their own from adult males other than the father.

The hearing, seeing, touching, and smelling of sex differences are important ingredients of life for the young child. Not to know a sexually robust male as one's father is conceivably a crippling deprivation for one's psychic unfolding. Not to experience the daily wranglings and reconciliations of truly conjugal, interactive, and loving parents is a psychic deprivation for the child. It is depriving because the child might not learn roles essential to his own later procreative family life, i.e., to parenting, which is after all the goal of all child rearing. The family is, par excellence, the school for parenting in all economic classes, and in the lower-class partial family some skewed schooling for parental behavior occurs (12).

Economic Differences

A partial family is economically different from a complete family. In the fatherless family, the getting and the giving of security are thrown awry. Both the family's "expressive function," referred to by the phrase "feeling secure," and "instrumental function," often referred to as "biologic maintenance," are imperiled.

It is possible that there is a wide range of variations in the providing of material security within a family unit, but one thing is certain: Children always consume security, and parents provide it. Both parents may participate directly in work for pay, or only one parent may, as, for example, the middle-class father. Research in maternal deprivation has revealed that when a young infant's mother is away (at work or in the hospital or dead) during the period when the infant is six to 18 months old, serious emotional deprivation is most likely to occur, with far-reaching consequences for the child (13). Since infants need to derive security from mothering persons, poverty is the economic substrate for maternal deprivation.

Even in poverty the conjugal family has economic advantages surpassing those offered by the partial family. Despite his being unemployed and having his leadership eroded, as Mirra Komarovsky (14) has shown, the father, being present, is an asset to family morale by virtue of his presence as an employable adult male. Some property, skills, technology, and economic potential accrue whenever a father is present in a household. As a corollary, whenever a female adult is the sole parent present in the urban slum family, the children are thus lacking in security. In this case, money (in the form of a family subsidy, guaranteed annual wage, and negative income tax) would assist the poor to strengthen their family life and would alleviate some of the most serious problems of the lower-class partial family. Leon Keyserling and Barry Goldwater have acknowledged this need, as have many people whose politics lie somewhere between Goldwater's and Keyserling's. Poor people do need money.

Political Differences

A partial family is politically different from a complete family. The allocation of authority, both formal and informal, seems to handicap the child who grows up in a partial family. Whether the family is patriarchal, matriarchal, "filiarchal," or egalitarian, the give-and-take and checks and balances of family living instill in the child of the complete family a "political sense" that serves him advantageously in the larger modern society where much hammering out of power arrangements is required.

The child in the partial family learns little of all those power relations which are in the paternal mode. I was intrigued many years ago when one of the black college students in a class I taught said to another, "Oh, good, I had heard it was your mama that died. I didn't realize it was just your daddy." That condolence bespeaks matriarchy, without a doubt; but matriarchy is a form of family and of human experience that has durability and merit. Furthermore, a true matriarchate is a complete family—a unit of male, female, and child or children. Perhaps it is not matriarchy that must be diminished, but only the impoverished partial family. Erstwhile poor families (whether they be black or white) are bound to show vestiges of matriarchy that persist for two or three generations, despite any upward mobility that they may experience. I see no reason why the poor family must be required to become like the affluent, or the blacks like the whites. Service programs for children who are in need

certainly do not require that uniform family patterns must first be established before help is extended to the children.

Honorary Differences

A partial family is honorarily different from a complete family. Generally, the child with least shame and least apology comes from an intact conjugal family. His reputation and self-esteem are more firmly guaranteed. On the other hand, the child from a partial family must move about constantly feeling derogated and ill at ease.

Psychodynamic investigation has demonstrated that, in the main, the outlines of a child's self-concept are laid down in the first two years of life. Nonetheless, the continuous reinforcement of unfavorable (or favorable) self-pictures operates to revalidate one's image during all the subsequent years of life. Children in all eras undoubtedly have felt excruciating shame for their parents (15), most notably when their parents have not been "respectable" in the community. Blacks are often found to be riddled with self-hate (16). Blacks living in slums project this onto a humanity that is vicious and evil, not always realizing that their very self-hatred is a manifestation of their oppression by racism and poverty.

When in a white, racist world the darker black child is derogated by his own black mother, when the fact of blackness is regarded as an ineradicable stigma, and when black families perpetuate racism both directly (as "White is best") and in its reversed form as black racism ("Black is best"), then the black child wrests self-esteem at a high cost. If, in addition to being black, he is poor and has no father, he and his self-respect could be said to have "had it" three ways!

CONCLUSIONS

It seems important to recall that not all poverty is equally disorganizing or anomic (17). In many poor families there prevails a sense of integrity, humanism, and competence—with the invariable accrual of edification to all members of these families. However, these are infrequent individual cases, and although they defiantly transcend the norm, they cannot be made the focus for generic social engineering. The latter requires a closer look at the statistical norm. The norm is more informative and more relevant. To the extent that the lower-class partial family is the norm, it—not the successful exceptions—must be underscored as the focus for initiating change. If the lower-class partial family does perform necessary social functions, then it merits subsidy and supporting services so that, at least, it can function under reduced economic burdens.

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About Psychiatry, Psychiatrists, and Social Problems

IN PUBLISHING THE GROUP OF PAPERS that appears in this month's Special Section, the *Journal* is facilitating a process that is of major importance for psychiatry and for psychiatrists: that of evolving "a consensus about the place of social and community psychiatry in our profession" (1).

Pursuit of such an objective—in itself a social issue—involves changes in our concepts and practices, and thus, as with change process in general, it engenders transitional confusion, conflicts, and turmoil.

One approach to the study and resolution of problems that psychiatrists have customarily used to advantage is that of a case method. This can be applied not only to clinical cases but also to nonclinical case situations. Thus, the six papers in this section may be read not only with regard to their respective topics per se, but also as "cases" of social psychiatry. Each reader is thereby provided with examples of how these particular authors have variously related social and psychological data to psychiatry. It would seem decidedly helpful to examine critically each such case example from the standpoint of furthering one's thinking through of key problematic questions about social psychiatry. For though it is easier to generalize and to take stands about these questions in the abstract, it is when we get down to specifics that we confront their true complexity and their implications for psychiatry and psychiatrists.

Some of the pressing questions and dilemmas that beset us, and upon which controversy centers, stem from the rapid expansion of our professional domain that the developments in social and community psychiatry have been bringing about. Thus, for instance, are we exceeding the limits of our professional knowledge base and competence by involving ourselves in problems such as racism, poverty, war? Or, if we avoid such involvement, are we failing in our rightful professional responsibilities? Furthermore, although these broad issues are of critical importance to us all as citizens, are they relevant to our central psychiatric mission with regard to mental illness? Can we as physicians preserve our essential objectivity if we become active in political controversies in our professional capacities?

In addressing themselves to these questions, an increasing proportion of APA members in the past few years have signified their commitment to extending and intensifying the profession's involvement in broad social problems as these relate to mental health and illness.

The term "involvement," however, means many things to many people, and individual psychiatrists vary, of course, in how each is equipped and motivated to express it in his particular work. But for our profession as a whole, responsible involvement in social issues must encompass a synergistic aggregate of different kinds of psychiatric effort.

In this section the Editor samples varied opinions on topical problems. The opinions expressed herein are not necessarily those of the Editor, nor can they in any way be construed as marking the official policy of the Journal.

Thus, the soundness and value of our pronouncements and positions on matters of broad public policy depend on the results of scientific investigation and scholarship, as well as on clinical understanding and experience. But the social utility of findings about sociopsychiatric relationships depends on our making these known to the policy makers and to the general public, and in our combating, through political process, those features of society which pose serious threats to mental health.

While to some of us, activity in politics seems at variance with the physician's role, it can be recognized as consistent with it *if* it is used as an indirect tool for the traditional psychiatric purpose in preventing and relieving mental disorder.

By definition, the hybrid term "social psychiatry" connotes the necessity for cross-disciplinary collaboration, as well as for many other new types of working relationships and work settings. Previous unfamiliarity with these and many other aspects of social psychiatry can be anxiety arousing and thus complicate one's attitudes about its value. For both adherents and opponents of greater social involvement of psychiatry, the personal emotions and conflicts that are entailed warrant the professional safeguard of our careful and continuous self-examination as we strive to integrate clinical and societal approaches for greater psychiatric effectiveness.

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More Changes for the *Journal*

THE ARRIVAL of the January 1973 issue of the *Journal* in its new "A" size, and with its new cover and changes inside, probably startled some of our readers. We had written about these changes earlier, but the actualization might have been a little more dramatic than we anticipated. Also, the January issue began volume 130: henceforth our volumes will run concomitantly with the calendar year. None of these changes came easily. Like most of our readers, we had gotten quite comfortable with our green journal. However, technological progress propelled us in the directions we took, and we cannot look back nostalgically now. We noted earlier that change, while ever necessary, is often painful.

We now have another announcement. On December 8 the Board of Trustees approved changes in the makeup of the Editorial Board, as three distinguished colleagues rotated off and three new ones were appointed. Those who are leaving the Board are Doctors Henry Brosin, Henry Davidson, and Howard Rome—distinguished associates, all of them; the last mentioned is president of the World Psychiatric Association. They have been valued associates and have done excellent work, and all of the official *Journal* family regret that they are leaving. Their departure is made easier, however, by the fact that they have promised to continue to help when called upon. The *Journal* and the APA owe this trio deep and sincere thanks.

New members of the Editorial Board are selected according to the needs of the *Journal*, the expertise of the individual in certain aspects of our discipline, and by their

records of assistance above and beyond the call of duty in reviewing manuscripts and books. True enough, there are many colleagues who meet these requirements, and the Editorial Board was hard put to make final recommendations to the Editor. Basically, the deciding factor was the *Journal*'s urgent need for expert assistance, particularly now as our office is inundated with manuscripts and our specialty becomes increasingly complex.

The Board of Trustees has approved the following appointments; this month their names appear on the masthead of the *Journal* for the first time:

John M. Davis, M.D., former Chief of the Unit on Clinical Pharmacology, Laboratory of Clinical Science, National Institute of Mental Health, and former Associate Professor of Psychiatry, Johns Hopkins School of Medicine. At present Dr. Davis is Professor of Psychiatry and Associate Professor of Pharmacology, Vanderbilt University School of Medicine, Nashville, Tenn., and Director of the Clinical Division, Tennessee Neuropsychiatric Institute. He is consultant to a number of government agencies and since his graduation from Yale Medical School, where he won the research prize in 1960, he has written or been co-author of nearly 200 scientific articles. It is known in the *Journal* office that when Dr. Davis reviews a manuscript, the staff receives a liberal education from his comments.

Dr. H. Keith H. Brodie is at present Assistant Professor, Department of Psychiatry, Stanford University School of Medicine, Stanford, Calif. He has been the recipient of numerous awards and fellowships, among them the Sol Ginsburg Fellowship of the Group for the Advancement of Psychiatry, the A.E. Bennett Clinical Research Award of the Society of Biological Psychiatry, and the Psychopharmacology Award (first prize), American Psychological Association, 1970. Dr. Brodie is Special Assistant to the Chairman for Administration, Department of Psychiatry, Stanford University, and is Chairman of the Medical School Faculty Senate. He has held several visiting lectureships and has been closely associated with Dr. Melvin Sabshin on the Program Committee of the APA; he currently serves as vice-chairman of that committee.

Dr. Rebecca Solomon has been Senior Clinical Associate in the Department of Psychiatry at Yale since 1968. She had graduated from that institution in 1939 and was an intern, a Milbank Fellow in Medicine, and later a resident in psychiatry in the same institution. Dr. Solomon is also a graduate of the Western New England Institute for Psychoanalysis (1960), and since then has served as its vice-president and is now its president. She has also been the president of the Connecticut Psychiatric Society and has been the recipient of many honors. Dr. Solomon's experience has been broad. She has been a member of the Connecticut State Board of Mental Health, a representative to the Executive Council of the American Psychoanalytic Association, and a lecturer at the University of Connecticut School of Social Work. Earlier in her career she was psychiatrist and physician to the Connecticut School for Boys. At present Dr. Solomon teaches at the Institute of Living, Hartford, Conn., and at Yale Medical School and is in the private practice of psychiatry in Hartford.

The Editorial Board and the staff welcome these new members of the Board and look forward to working with them. Their capabilities have already been proven, their expertise is needed, none of them is a stranger to hard work, and their duties on the *Journal* Board will keep them in practice.

F.J.B.

BRIEF COMMUNICATIONS

Countertransference Reactions to Violent Patients

BY JOHN R. LION, M.D., AND STEFAN A. PASTERNAK, M.D.

Treating violent patients can evoke countertransference reactions of fear and anger in therapists that may interfere with effective management. The authors present six case reports in which countertransference reactions deleteriously affected the treatment outcome. They stress the importance of the physician's being aware of his fear and of how this fear may distort, by projection, his view of the patient as being dangerous.

IN PREVIOUS WORK we have described the clinical features of patients who appear in emergency room and clinic settings with complaints relating to assaultive and destructive urges (1–4). In the course of treating and supervising the therapy of such patients, we have noted recurring countertransference reactions that interfere with their evaluation and management. We describe here the nature of these reactions, using the term "countertransference" to mean any emotional reaction that the clinician has toward the patient (5).

Probably no group of patients evoke as many anxieties in the clinician as those who relate such violent urges as the fear of running amok and of killing someone or those who describe patricidal or infanticidal impulses. While the suicidal patient's aggressive urges have not yet transcended his personal boundaries, the violent patient—particularly if he has been violent in the past—is an individual who may hurt someone besides himself. In the back of the clinician's mind is the possibility that the patient may turn his aggressive urges on his therapist if the latter does not fulfill the patient's therapeutic expectations. The clinician may also fear that his patient will develop a pathological distortion of therapy; stories about the paranoid patient who kills his psychiatrist are commonly fantasized.

It is therapeutic wisdom for the therapist to have some anxiety about treating a violent patient. In the case of a paranoid patient, for example, concern for the development of a dangerous psychotic transference should continuously propel the therapist to carefully monitor the relationship with the patient. However, while hazards exist in treating the violent patient, we have observed that anxiety concerning the patient's dangerousness often gets out of hand.

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CASE REPORTS

Case 1. A prisoner convicted of assault was transferred to the psychiatric unit of a hospital because of suspicious behavior. He was evaluated by a staff psychiatrist, who found that he was not psychotic but that he did have definite paranoid traits. The patient blamed all of his difficulties on the police and prison authorities. He was negativistic and hostile and spoke of physical force as a solution to emotional problems. Interviews with him were difficult, and his psychiatrist emerged from a particularly frustrating session with marked anxiety and an irrational fear that the patient, who still had a one-year sentence to serve, would try to ambush him at home and kill him. In a discussion with a colleague he came to the realization that he was furious at the patient and actually had the desire to physically strike him. As he came to grips with these feelings, the fear of harm subsided, and eventually a more positive relationship prevailed during the remainder of treatment.

In this case the therapist did not have easy access to his angry feelings and became irritated because the patient continually projected all of his difficulties onto the environment and evaded introspection. This is particularly likely to be the case with paranoid patients. Patients who act out extensively, such as those with severe character disorders, also produce the same feelings in physicians. Although the acting out may be dynamically understood by the physician, he may still feel anger and helplessness in controlling an individual who translates affective issues into destructive behavior—behavior that the therapist may feel reflects badly on his therapeutic abilities. Anger and helplessness seem to us to be the basis for another not-uncommon fantasy expressed by therapists: that their patients will do something terrible (e.g., commit a mass murder) and that they, the therapists, will then be held liable. Such fantasies, of course, always require the most serious and urgent consideration as to their basis in fact. Yet we have observed that this particular fantasy often derives from a feeling of anger and helplessness which the physician has toward his patient. This helplessness is projected onto the patient, and he is perceived as an individ-

ual capable of doing immense harm. In case report 1, anger led to the physician's fearing personal harm even though no threat had been made.

Helplessness may also be evoked in the physician by the fact that the patient is potentially dangerous. This helplessness is apt to be handled defensively, as the following case report illustrates.

Case 2. A 36-year-old man was admitted to the hospital in a state of delirium tremens and was treated by a first-year resident psychiatrist. As he improved, he was allowed a special pass to leave the hospital. He returned from leave one night with a loaded revolver.

Apparently he had brought back a bulky package and had handed it in with his other personal belongings. When the package was submitted to routine inspection, the weapon was discovered. The patient readily admitted that it was his gun and that he had brought it to the hospital for "safe keeping." The resident hastened to the ward to discharge the patient because "those who bring guns to the hospital obviously do not belong here." He resisted understanding the meaning of the man's behavior. He ignored the fact that the patient could have kept the weapon concealed and that his turning it in to the hospital reflected an underlying conflict.

When instructed by staff supervisors to retain the patient in order to further investigate this conflict, the resident refused. He persisted in his wish "to be rid of the derelict." Only the threat of suspension made the resident alter his stance. It was subsequently learned that only six weeks before the man had been released from prison because of armed robbery. He had been approached by his friends to take part in a new holdup but had turned his weapon in to the hospital, hoping for protection. In discussion it became evident that the resident harbored a marked fear of the patient and of weapons. His insistence upon discharge was his means of dealing with his anxieties.

This case illustrates the physician's overreaction to the violent patient and the principle of denial. Denial is the most ubiquitous defense against anxiety generated by a violent patient. In its most common and most insidious form, it manifests itself in the clinician's failure to gather unflattering and anxiety-producing anamnestic data. Time and time again we have found it necessary to ask residents to inquire about patients' ownership of weapons and ammunition, their lethal skills, past criminal or violent acts, or driving habits. It has been our distinct impression that psychiatrists do not ask such questions, but defensively conceive of these queries as belonging more in the forensic realm than in the province of clinical psychiatry. The need to ask such questions has been stressed by Macdonald (6). In certain other instances the predominant emotional reaction to the violent patient has been anger or rejection of the patient as a "prison case," an "untreatable psychopath," or a "harmless drunk"—this despite the knowledge that drinking is implicated in a very large proportion of violent crimes and automobile fatalities.

The following case report is an interesting, although extreme, case of denial.

Case 3. A 19-year-old college student barged into the office of his therapist armed with a .22 rifle. He fired, but the gun failed to discharge, and the student attempted to strangle his would-be victim. The therapist fought back enough to discourage his patient, who then wept. The patient called out for help and protested that once again he was the victim of racist plots that might destroy him. He begged for mercy. The therapist took the gun and gave it to his secretary. He then escorted the tall, heavy-set patient to the emergency room—a long walk over the hospital grounds and through a complex series of dark tunnels. Once there, he notified the emergency room clerk to summon the psychiatrist on call, since he wished to admit the patient to the hospital. He gave the clerk no information regarding the urgency of the request. The doctor then left the patient sitting alone in a room. Two hours later the psychiatrist on duty, who had still not been notified about the case, found the patient. The referring psychiatrist explained his approach, saying: "I did not want to influence your decision regarding the need to admit the patient."

This is a frightening case and an unusual one. The denial can well be understood in the face of the crisis but is nonetheless glaring. An additional interesting fact about this case was that in therapy the resident overlooked the dangerous potential of the patient and focused instead on his earlier life conflicts, his mistreatment at the hands of cold and controlling parents, and his difficulties facing the vicissitudes of life. He avoided dealing with the negative aspect of the patient's psychotic ambivalence and hostilities until, at length, this omission was pointed out to him in supervision. Both the resident and his supervising therapist had made extreme attempts to form a positive therapeutic alliance with a patient they sensed to be dangerous.

To face the issue of dangerousness is very threatening to the physician, much as it is to face the seductiveness of a female patient; the therapist's human vulnerability emerges, and he must deal with his own strong emotions. Aggression is a subject that revives conflicts which the psychiatrist is apt to have about his own urges. It has long been our opinion that the psychiatrist is in closer dynamic harmony with suicide and the introjection of hostile urges than he is with the externalization of such impulses. Violence directed outwardly is apt to be threatening. Events in the physician's life may be stirred up, as the next case report illustrates.

Case 4. A hospital staff psychiatrist sought informal consultation because he was afraid of a patient. The patient, who had a severe character disorder, had difficulty with hostile urges and had verbalized a desire to shoot another person. The psychiatrist, although never theatened, expressed fears for his own safety. In the course of conversation the psychiatrist related that several weeks before, he had gone on a camping trip with his wife in the mountains. The couple stopped to look at the scenery. Another car drove up, and a man got out and engaged in conversation. He then abruptly drew a revolver, fired at the psychiatrist at point-blank range, but missed. The psychiatrist instinctively tackled the man, throwing him over a ledge. The couple then immediately raced off, encountering a state trooper who ordered an immediate search of the area. The man was eventually found; he had a broken limb and was discovered to be an escaped prisoner.

This case demonstrates the revival of an actual, past attempt on the physician's life; this memory led to a distortion of the patient's dangerousness and interfered with

a working relationship. In other cases we felt that the patient's patricidal or infanticidal impulses reawakened conflicts that the clinician himself had about similar impulses. This seemed to be the case when the therapist had ruminative, obsessive preoccupations about the dangerousness of the patient. Our speculation was, of course, difficult to prove in the course of supervision, since personal exploration is inappropriate in such settings. Ventilation, however, proved to be immensely useful and led to a more realistic appraisal of the patient. Fromm-Reichmann (7) has described a personal case in which she was irrationally afraid of a patient; consultation led to a therapeutic relationship unhampered by such emotions.

Patients on ward settings can generate negative countertransference reactions among nursing personnel (8). This happens most typically when the patient is agitated and exhibits motor restlessness or belligerence, together with flouting of ward rules and regulations; as a result, nursing staff members become alarmed and angry.

Case 5. A 19-year-old college student with a long history of drug abuse was readmitted to the hospital in a state of toxic psychosis. He was unkempt, incoherent, agitated, and menacing. A well-developed, muscular young man, he acted bizarrely and unpredictably reached out for those who passed by him. During patient group meetings, he would pace nervously and suddenly thrust his face close to the face of another. At times he shouted wildly and refused to obey instructions. He talked of wishing to kill his father for being "a bastard." The patients decided to exclude him from the group meeting. Staff members reacted to the fears of the patients and gave the patient increasing amounts of medication. The patient was also placed in seclusion where he became violent and banged on the walls. This behavior generated even more anxiety, and more repressive measures were taken.

In viewing the situation with ward personnel, it became apparent that the patient had responded to verbal intercession in the past, although persistent efforts were indeed required in this direction. Because of frustration and fear, necessary attempts to talk with the patient had been abruptly abandoned in favor of sedation and isolation. When attempts were again made to talk with the patient about his anger, he responded positively, and the other measures were not needed.

This case points out how a patient's dangerousness can become exaggerated by the very measures that are prematurely instituted to control him. The staff members withdrew from interacting with the patient and handled him punitively. This intensified a bad situation, since it removed the patient from therapeutic human contact and worsened his alienation. Since patients with aggressive urges fear losing control of such urges, they become even more agitated when they sense that everyone is afraid of them. In the situation described here, ventilation of the staff members' frustration with and fear of the patient led to a reduction in their perception of him as threatening.

Identification with an aggressive patient can occur in ward settings.

Case 6. A 26-year-old soldier was hospitalized because of bizarre, violent behavior. It was learned that he was a former boxer and professional football player, with a long record of violent outbursts for which he had been hospitalized. He was a powerfully built man who projected an aura of dangerousness. His arrival on the ward caused great concern among the staff. All of them wished to know what to do in case he "went wild," since they feared that no one could restrain him.

Within several days an interesting reaction was noticed. Some nursing staff members began to supply him with cigars; several of the patients and staff members began to imitate his mannerisms, and his colloquialisms became widespread among certain male patients. Weight lifting became a fad on the ward, and a number of younger staff members and patients were soon participating in physical exercises with this patient, who regularly performed his own. Within several weeks the patient was elected to a leading ward government position. These events had a beneficial effect on the patient, who seemed transformed into a well-liked individual.

One night, however, when aroused from bed by a policeman who had come to investigate a recent act of violence, the patient became enraged and threatened to kill "the goddamn cop." He was on the verge of losing control and of violently attacking his accuser when patients and staff approached him and assiduously encouraged him to contain himself. He ranted and raved and broke a chair but did not attack his accuser. This explosive incident exposed his deep-seated problems and his barely submerged potential for violence, issues that had not come to light until then.

More subtle variations of identification are occasionally noted on ward settings. Staff and patients, as well, may take a special interest in the patient, find him "charming" or "interesting," and listen avidly to his accounts of past antisocial acts without coming to grips with and challenging the patient's aggressive propensities.

Patients who experience violent impulses desperately want help in curbing such urges (2, 3). Violent patients are terrified of losing control and welcome therapeutic efforts that restore a sense of control and prevent them from acting on their urges. To this extent the therapist must explore all avenues of aggression with the patient and squarely face issues of destructiveness, pointing out to the patient that the goal of this exploration is to prevent the very aggression that disturbs him. The physician must be aware of his own fear of and anger at the patient and of the effect these feelings may have in distorting the dangerousness of the patient via projection. The therapist must be careful not to reject the patient or to forget to inquire about situations that could result in the patient's becoming violent. Finally, the clinician must be aware of the emotions evoked in nursing staff by violent patients and the role these emotions play in complicating management of an already problematic group of individuals.

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Imipramine Therapy and Seizures: Three Children Treated for Hyperactive Behavior Disorders

BY DAVID BROWN, M.D., BERTRAND G. WINSBERG, M.D., IRV BIALER, PH.D., AND MARK PRESS, M.S.

The authors report three cases of children who developed seizures while receiving imipramine treatment for hyperactive-aggressive behavior disorders; all three children had organic brain disease but no previous history of seizures. Two of the children remained seizure-free after anticonvulsant medication was added to the imipramine regimen. The authors suggest that clinicians prescribing imipramine be alert to the possible complication of seizures.

RECENTLY we reported imipramine to be effective in the management of behaviorally deviant children (1). While we found imipramine to be beneficial, we cautioned that its use required close surveillance for possible systemic toxicity. Since the preparation of that report, we have observed the development of seizures concomitant with imipramine therapy in three children without a previous history of a convulsive disorder. This paper reports those cases.

CASE REPORTS

Case 1. D.A. was a three-and-one-half-year-old black male who was seen in the neurology clinic for evaluation and treatment of hyperactivity and autistic behavior. History indicated he was the product of a normal pregnancy, labor, and delivery and weighed five pounds, eight and one-half ounces at birth after a 40-week gestation. Normal development was manifested up to one and a half years of age. From ages one and a half to three and a half, retarded progression was characterized by babbling, lack of understandable language, failure in toilet training, and inability to play with toys or to relate to people in a conventional manner.

There was no past medical history of meningitis, encephalitis, pica, serious head trauma, or convulsions. Both parents and all siblings were alive and well. There was no family history of seizure disorders.

Physical examination revealed a tense, irritable, hyperactive boy who related inappropriately to adults—running around the room, babbling, and screaming. He was below the third percentile in weight and below the 25th percentile in height. The standard physical and clinical neurological examinations were negative. The Gesell Developmental Neurological Examination revealed an adaptive developmental quotient of 70, with considerable scatter on all subtests. This is consistent with a diagnosis of chronic organic brain disease and retarded intellectual development.

Skeletal survey, 12 laboratory determinations of blood chemistry, dermatoglyphics, and blood count were normal. Electroencephalograms performed at three months prior to, one month prior to, and two months after the seizure episodes were interpreted as normal for age-sedated sleep.

D.A. was initially treated with 5 mg. of dextroamphetamine twice a day and was subsequently switched to 10 mg. of methylphenidate daily. Since both medications resulted in increased hyperactivity, 25 mg. of imipramine three times a day was instituted, and improvement was noted. Because of the development of tolerance after three weeks, the dosage was increased to 25 mg. four times a day, then to 50 mg. three times a day. After receiving 50 mg. three times a day for one week, he developed intermittent tremors, which did not disappear in sleep and which were followed by two seizure episodes one week later. The first episode consisted of falling from a chair and vomiting, followed by a two-hour period of lethargy and hypotonia. The second seizure occurred three hours after the first and was character-

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The authors would like to thank Kytja Voeller, M.D., who read and interpreted the EEGs.

ized by clonic tonic movement of the extremities, followed by postictal sleep. Neurological examination, skull X rays, and blood count performed at periods of four hours and one week after the convulsions were all within normal limits.

Medication was subsequently discontinued with no further evidence of seizure disorder for a six-month period (i.e., to the time of this writing).

Case 2. G.R. was a six-year-old black male admitted to the psychiatric unit for control of hyperactive and aggressive behavior. His mother had had a normal pregnancy, labor, and delivery, and he weighed seven pounds, 14 ounces at term. He showed normal development up to one year of age, at which time he was hospitalized for tuberculous meningitis. Subsequent retarded development has led to a current Merrill-Palmer IQ of 52 and a full scale IQ of 53 on the Wechsler Preschool and Primary Scale of Intelligence.

G.R. was again hospitalized at age two for pneumonia and at age six for a tibial fracture. He had no history of serious head trauma, pica, or convulsions, and there was no family history of seizure disorders.

Physical examination revealed a hyperactive child who was above the 50th percentile for both height and weight. Both neurological and physical examinations were within normal limits.

The patient was treated with 50 mg. of imipramine three times a day for one week with good results, but the dosage was increased to 75 mg. three times a day to overcome tolerance. After three weeks on this regimen, he experienced a clonic tonic seizure with incontinence, drooling, and eye rolling, followed by 40 minutes of postictal sleep.

Neurological examination and electroencephalogram on the following day were within normal limits for age. He was continued on 75 mg. of imipramine three times a day, combined with 30 mg. of phenobarbital three times a day, with good control of behavior and no further seizures. Loss of behavior control five months later prompted changing medication to 50 mg. of chlorpromazine three times a day. He has had no recurrence of seizures during the 13 months prior to this writing.

Case 3. A.S., an eight-year-old black male, was seen in the clinic for evaluation and control of severe hyperactive and aggressive behavior. The mother's pregnancy, labor, and delivery were said to be normal. However, the child weighed four pounds at term after a 40-week gestation and required incubator care for one week. His development was characterized by relative physical inactivity for the first two years, first sitting unsupported at ten months and walking alone at 18 months. He remained enuretic until age eight.

Medical history included pyelonephritis at seven months of age and rubella at nine months. There was no history of serious head trauma, meningitis, pica, or convulsions. He was the fifth of seven children. One sister, age three, was retarded, and a brother, age eight, showed a severe behavior disorder.

Repeated physical, neurological, and laboratory examinations were all within normal limits. He was of average height and weight, with a Wechsler Intelligence Scale for Children (WISC) IQ in the dull-average range.

A pretreatment electroencephalogram (EEG) was interpreted to be "an abnormal tracing, no specific focus, nonparoxysmal, compatible with some form of cerebral dysfunction." After unsuccessful trials on dextroamphetamine, methylphenidate, trifluoperazine, and haloperidol, A.S. was treated with progressively increasing doses of imipramine up to 75 mg. three times a day, with good clinical response. However, after three months of treatment, he experienced a grand mal seizure that was preceded by tremors and characterized by an expiratory grunt, tonic clonic movements, and loss of consciousness. Subsequent examinations were normal, except for an EEG performed one day after the seizure; this was read as being "poorly organized, no clear epileptic abnormality."

Dosage was subsequently reduced to 50 mg. three times a day, with good behavior control until two months later. At that time the patient, who had been off medication for a period of five days, exhibited mutism, staring episodes, and purposeless, disorganized, and frenetic behavior, which prompted hospital admission. Physical, neurological, and laboratory examinations were noncontributory except for two EEGs. The first EEG was interpreted as "normal sleep pattern in an awake subject," and the second as "much paroxysmal slowing, consistent with encephalopathy." The patient improved on diphenylhydantoin (Dilantin) and was subsequently discharged, fully recovered, on a combination of 60 mg. of diphenylhydantoin three times a day and 50 mg. of imipramine three times a day. Laboratory data, including a lumbar puncture examined for viral disease, were negative.

Two months later A.S. was readmitted to the hospital after experiencing two grand mal seizures that were precipitated by an inadvertant decrease in the diphenylhydantoin dosage. An EEG performed two days after the seizure revealed "paroxysmal slowing and high voltage, compatible with grand mal seizures." The most recent EEG, performed one month later, was read as "abnormal record, poorly organized with biposterior paroxysmal slowing."

He has remained seizure-free to the time of this writing (a period of one and one-half months) on combined dosages of diphenylhydantoin and imipramine.

DISCUSSION

There have been several scattered reports in the literature associating imipramine treatment with the development of seizures in both depressed adults and enuretic children (2–6). On the other hand, it is interesting to note that Fromm and associates (7) found imipramine to have an anticonvulsant effect on minor motor and/or petit mal seizures in ten of 13 children with coexistent grand mal or psychomotor seizures. Unfortunately, they also found the drug to exacerbate the major seizures in some of those patients.

One unpublished survey by Geigy Pharmaceuticals (8) on over 4,000 children treated with imipramine for the control of enuresis found that five children (.11 percent) developed seizures; however, the previous convulsion history of these children is unknown. The three children reported here (who are known to have had no previous history of seizures) represent approximately three percent of those children treated with imipramine who have come to the attention of this unit. It should be noted that this unit tends to see the more seriously impaired of the children referred to this medical center. Consequently, our experience should not be construed as representative of the expected frequency of seizures among all behaviorally impaired children receiving imipramine treatment. The occurrence of convulsions in our population could possibly be accounted for by the nature of our sample, e.g., brain-injured children, who are known to be seizure-prone. Such occurrence could also be due to the higher

doses employed to treat behavior disorders, as compared with those used for enuresis. A pharmacokinetic study is currently in progress to investigate why relatively high doses of imipramine are needed for controlling hyperactive-aggressive behavior.

CONCLUSIONS

We have reported three cases of children with no prior history of seizure disorders who developed convulsions while being treated with imipramine for hyperactive-aggressive behaviors. All three had organic brain disease and did not respond to psychostimulant therapy prior to imipramine treatment. It is important to note that in two cases seizure-free response to imipramine was maintained with the addition of anticonvulsant medication. Although we cannot definitely state that imipramine provoked seizures in these three children, the findings of Fromm and associates (7) and our own observations indicate that the association is strong enough to warrant care on the part of the physician prescribing this medication. Further clinical and laboratory study into the possible association of imipramine and seizures is indicated.

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Alcohol-Induced Sexual Impotence

BY FREDERICK LEMERE, M.D., AND JAMES W. SMITH, M.D.

Sexual impotence resulting from prolonged alcohol abuse may persist even after years of sobriety. The authors believe this problem is neither a psychological nor a hormonal defect but is due to the destructive effect of alcohol on the neurogenic reflex arc that serves the process of erection. The damage may be irreversible, accounting for the inability of some men to reattain potency.

AFTER TREATING over 17,000 patients for alcoholism during the past 37 years at Shadel Hospital in Seattle, Wash., we have become increasingly aware of male impotence as a serious complication of prolonged heavy drinking. At least eight percent of our male patients have complained of impotence, and in approximately 50 percent this has persisted even after years of sobriety.

Although alcohol may act as a temporary sexual stimulant, its chronic abuse can destroy sexual ability. In this regard alcohol becomes less and less effective until potency is lost, sometimes never to be regained. To quote Shakespeare: "[Drink] provokes, and unprovokes; it provokes the desire, but it takes away the performance. Therefore much drink may be said to be an equivocator with lechery." Or as one patient said: "I drank Early Times, but the result was Old Grandad."

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DISCUSSION

We believe that this phenomenon is caused by the stimulating and then destructive effect of alcohol on the neurologic reflex arc subserving erection. This arc theoretically includes: 1) the cerebral cortex, from which sexual thoughts arise, 2) the anterior portion of the temporal lobe, which determines intensity of libido, 3) perhaps the hypothalamus, 4) the spinal cord reflex centers for erection, and 5) the peripheral nerves that convey sensory and vasomotor impulses to and from the genital organs. The mechanism of this might be compared to the diminution of sexual ability complicating the generalized nervous system damage caused by uncontrolled diabetes.

We stress the importance of the malfunction of erection because nearly all of our patients who complained of impotence still had a strong desire for sex but, much to

their chagrin, were unable to perform. Supporting this theory that the basic handicap in alcoholic impotence is a neurogenic weakness in or absence of erection is the fact that few if any of our female patients have complained of sexual inadequacy from drinking. Women are spared the necessity of having to achieve an erection to engage in sexual relations.

It might be argued that impotence which persists after sobriety has been attained could be due to a resurgence of psychological sexual inhibitions and guilt feelings that were formerly suppressed by alcohol. That this was not the case in our patients is attested to by the fact that most of them had had a normal sex life, with or without using alcohol, until its abuse destroyed their sexual ability. In addition, their guilt was not related to sex but rather to their inability to satisfy their wives' or companions' needs in this respect. In approximately 50 percent of the cases satisfactory sexual function gradually returned after several months of abstinence from alcohol.

CONCLUSIONS

For the above reasons we do not believe that the alcohol-induced sexual impotence was psychological. Nor do we believe that it was hormonal since testosterone failed to help these patients. We do believe that it was neurogenic; that if damage to the nervous system by alcohol is severe and prolonged enough, it may be irreversible, resulting in permanent sexual impotence even during a state of sobriety. A vicious circle, or rather a downward spiral, is created by the excessive use of alcohol in which more and more alcohol is needed to effect fewer and fewer sexual results.

Unfortunately we have found no treatment for this problem except to warn heavy drinkers who are experiencing early signs of sexual failure to stop drinking in the hope that sobriety and time will restore their sexual vigor.

Symptomatology of Depressive Illness in Afghanistan

BY RAFIQ WAZIRI, M.D.

In a cross-cultural study of depressive symptoms in Afghan patients, the incidence of such "biological" symptoms as depressed mood and loss of appetite, sleep, and libido were similar to the reported incidence of these symptoms in depressed patients from a Western culture. Some symptoms that may be affected by cultural differences were also comparable, except for suicide and suicidal thoughts. The majority of Afghan patients expressed death wishes rather than suicidal intents or thoughts.

CROSS-CULTURAL STUDIES of psychiatric disorders are of interest because they shed light on which symptoms may be attributable to a basic illness and how they may be influenced by cultural variables (1). In Western cultures the symptomatology of depressive disorders has been well described from the time Kraepelin established the entity of manic-depressive psychosis. In the West endogenous depressions are characterized by dysphoric mood, vegetative disturbances (insomnia, anorexia, loss of libido and pleasure in life), self-blame and guilt feelings, motor retardation, hopelessness, suicidal thoughts, diurnal variation in mood, and other, less frequent symptoms (2–6). Pfeiffer (7), after reviewing the literature on depression based on 40 reports from 22 non-European countries, concluded that in these countries the core symptomatology of depression is quite comparable to the depressive symptoms described in the West. These symptoms include mood changes; loss of sleep, appetite, and libido; variation in diurnal rhythm; and hypochondriasis. Such symptoms as guilt, hopelessness, and suicidal tendencies are modified by cultural factors. Unfortunately, in most non-European countries facilities for the precise and detailed description of depressive syndromes have not been available, and authors have presented their findings in an impressionistic and anecdotal fashion.

This study was undertaken to describe for comparison's sake the symptomatology of depression in psychiatric patients in Afghanistan. I made the observations and gathered the data while I was a Visiting Instructor in the Department of Psychiatry and Neurology of Kabul University from January to November 1969. Since I am a native of Afghanistan and well versed in the language and culture of its patients, and have also had extensive training in the West, I was in an advantageous position to carry out this comparative study.

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The author wishes to thank Dr. George Winokur, Professor and Head, Department of Psychiatry, University of Iowa, Iowa City, for his helpful comments and suggestions.

GENERAL REMARKS

The Sanayee Hospital, where this study was carried out, is the only psychiatric inpatient facility available for the 13 to 15 million Moslems of Afghanistan. The hospital is part of the University of Kabul medical complex and is under the general administration of the university, which is itself a governmental institution. The joint Department of Psychiatry and Neurology that operates this facility is staffed by one professor, one associate professor, and two assistant professors who have been trained mostly in the French tradition of psychiatry. There are 80 beds for male patients and about 16 beds for female patients. Both psychiatric and neurological patients are admitted to this facility. Sixty of the beds are occupied by psychiatric patients, about 20 of whom are chronic and have been in the hospital for more than two years. The average length of hospitalization is six to eight weeks. Although indigent patients can be admitted to this facility, most patients have to pay a nominal sum for a period of at least one month.

In an underdeveloped country the care that psychiatric patients can receive is perforce insufficient, and yet, with the extensive use of electroshock therapy and modern psychotropic drugs, the rate of admission and discharge is fairly high. Of the patients discharged, about 90 percent have improved. According to the hospital register in a period from April 1967 to January 1968, 614 male patients were admitted to the psychiatry section and 189 male patients to the neurology section. Their diagnostic breakdown is shown in table 1. Certain observations can be made with respect to this breakdown. The category of hashish intoxication is probably composed of patients with a mixed group of manic and schizophrenic reactions, with florid hallucinations and delusions that show aggressive or socially unacceptable behavior consequent to the intake of large amounts of potent hashish. Many of these patients also suffer from an acute organic psychosis. The number of manics is about 50 percent greater than the number of depressives. This may be due to the high cultural tolerance to depressed behavior in contrast to manic behavior. The diagnosis of *confusion mentale* refers to organic psychoses with an etiology other than hashish intoxication. The category of neurotic states consists of patients with hysteria, anxiety reactions, sexual impotence, and reactive or neurotic depressions.

TABLE 1
Diagnostic Breakdown of Psychiatric Patients Admitted to Sanayee Hospital, April 1967–January 1968

Diagnosis	Number	Percent
Schizophrenia	206	33.0
Hashish intoxication	127	20.5
Neurotic states	103	16.5
Mania	75	12.3
Depression	49	8.5
Confusion mentale	28	4.9
Paranoid psychosis	17	2.8
Mental retardation	6	1.0
Malingering	3	0.5
Total	614	100.0

The figures shown in table 1 in no way indicate the actual incidence of psychiatric disorders in Afghanistan. The number of patients coming to Sanayee Hospital is probably a small fraction of those who need psychiatric attention. Most of the patients either receive no treatment or are taken to the nearest holy shrine where they are kept behind doors and in chains in the belief that the evil spirits will be banished by the holy religious leader buried there. I visited one of these shrines and saw patients who were being "treated" with mild to moderate pain-producing techniques while various religious chants were recited in conjunction with exhortations for the banishment of the evil spirit. Although no fixed fee is required for a patient either to become a resident of or to receive treatment in these shrines, the relatives of the patients are expected to donate alms for the keepers of the shrines, as well as to pay for the patient's food during his stay.

METHOD

All of the male patients were interviewed by me, or by the rotating interns in my presence, or by interns alone after they had learned interviewing techniques. After concluding that the patient was suffering from a depressive illness, we gave specific attention to recording information about the set of symptoms listed in table 2. In order to be diagnosed as a depressive, the patient had to have dysphoric mood, sleep disturbances, and loss of appetite or libido. Whenever such a patient showed psychotic symptomatology but no associative thought disorders, he was diagnosed as depressive. (In going over the records of some of the patients for the previous year, I noticed that a number of patients were diagnosed as schizophrenic simply because, along with manic or depressive symptoms, they also had delusions and hallucinations.)

After the initial interviews, it was noticed that symptoms of suicidal tendencies could be subdivided into death wishes, suicidal thoughts, and suicidal intent or attempt. In Afghanistan most people speak either Pushto or Persian; neither of these languages contains easily understandable words that convey the meaning of psychic depression in a poorly educated population. Most often, in order to elicit a symptom, easily understood examples were used, and the patient was asked whether he had experienced a certain feeling or thought or had behaved in a particular manner.

The mean age of the patients in this study was 45 years, with a range of 25–70, and the mean duration of illness prior to admission was 133 days, with a range of 5–500. About 35 percent of the patients gave a history of previous depressions and 18 percent, a history of manic episodes. Most of these patients suffered from severe depres-

sions because they had often come to the hospital from faraway provinces, by poor means of transportation, and after having tried the local and immediate means of alleviation for a number of months. The impression was that they belonged to the lower and lower-middle classes in Afghanistan.

At the end of September 1969, the intake records of these patients were reviewed. Of 41 records, 37 were acceptable in that the listed symptoms recorded were either present or absent. No attempt was made to record in a graded manner the severity of these symptoms since all patients were considered to suffer from a severe depression.

RESULTS

The most common symptoms were "sadness," sleep disturbances, and loss of appetite or libido (see table 2). Most patients had depressed facies; only three appeared to have a "smiling depression." Generally, patients had no words to describe their feelings of sadness. They were able to differentiate these feelings from the feeling of grief like that occasioned by the death of a dear one. Many described their feeling "as if a strong hard hand was squeezing" their "hearts." Thus, this feeling of sadness had a special quality. This was the most stressed symptom from which the patient wanted relief.

The complaint of sleep disturbances was elicited from 92 percent of the patients. Most complaints were expressed in terms of "I can't sleep," and only after further inquiry did it become apparent that most of the patients suffered from middle to terminal insomnia. Vegetative disturbances were also quite common, with loss of appetite being more frequent than loss of libido. Most patients expressed a loss of a sense of pleasure (e.g., one patient said that he no longer enjoyed his small children, who used to be a great source of pleasure to him). Loss of appetite and libido were quite common. More than 50 percent of the patients with these symptoms also reported a loss of weight. Two delusional patients would not eat, fearing that their food might have been poisoned. Crying spells were the next most frequent symptom that was bothersome to the patients. Most of them did not recall having cried since their childhood, and most often they could not give a reason why they would suddenly burst into tears. They would do their best to be alone so that nobody saw their tears. Obsessive thoughts were generally related to financial and business problems and rarely to guilt feelings or religion. Psychomotor retardation was observed more often in the older age group and especially in patients who had been sick for longer than three months.

In response to a question about how the patient viewed life, 54 percent answered that they "wished they were dead" or that they had "prayed to God to take their life away." When they were asked whether they had any thoughts of killing themselves or had attempted or intended to kill themselves, 20 percent admitted to passing thoughts of suicide but had banished these by thinking of the great sin they would be committing. Only six of the 37 patients (14 percent) admitted having had suicidal intentions, and only one (2.7 percent) had actually attempted suicide by cutting his throat. This latter patient was referred from surgery after his wound had been treated for about ten days.

Hallucinations and delusions were not too common. Most hallucinations consisted of the patient's hearing voices that accused him of sinful acts or of seeing the Jinns, which, according to these Moslem patients' beliefs, are ubiquitous creatures of God. Delusions were also culture-bound; for example, one patient, who had recently been married, became depressed soon after and lost his libido; he thought that another man who wanted his wife had put a charm on him. Sometimes patients would also have nihilistic delusions, such as a belief in the loss of their stomachs or testicles. The frequency of symptoms in different age groups appeared to be uniform, but since

TABLE 2

Occurrence of Symptoms in Different Age Groups and Comparison of Occurrence in Two Studies

Symptom	Age Range			Percentage of Patients Showing Symptoms	
	25–39	40–59	60+	This Study	Baker and Associates (14)
"Sadness"	9	20	6	97	100
Sleep disturbances (middle-terminal)	8	19	7	92	94
Loss of appetite and/or libido	7	18	5	90	87
Crying spells	7	16	6	78	61
Obsessive thoughts	1	15	6	58	6
Psychomotor retardation	3	15	4	57	65–71
Death wishes	3	15	2	54	?
Disturbance of diurnal rhythm	4	8	2	39	48
Guilt feelings	2	8	4	39	32
Hallucinations	3	6	3	33	9
Suicidal thoughts or intent	1	6	2	31	55
Delusions	1	4	2	16	19
Suicidal attempt	—	1	—	3	13

there were so few patients in some age groups, valid comparisons could not be made.

DISCUSSION

Given stringent diagnostic criteria for depression in one culture, it is possible to describe and compare the symtomatology of depression in another. The findings of this study show that the core symptoms of depression are quite consistent cross-culturally. This stands to reason in view of the large amount of evidence (8–13) indicating that endogenous depression is a genetic illness and therefore biologically determined. The most common symptoms of depression in patients from Western culture and in patients from Afghan-Moslem culture are intense dysphoria, sleep disturbances, and loss of appetite and libido. Whereas these core symptoms have been observed to occur with high frequency in different countries of different cultural backgrounds (7), certain other symptoms of depression, such as crying spells, guilt feelings, suicidal thoughts and acts, and obsessive thoughts, may have cultural determinants. In a careful study of depressions in American men of comparable mean age (45.9 years) Baker and associates (14) reported the frequency of these symptoms as follows: dysphoria ("sadness"), 100 percent; sleep disturbances, 68–84 percent; and loss of appetite, 87 percent. These figures correlate fairly well with the incidence of these symptoms in Afghan patients (see table 2). The frequency of two other "biological" symptoms—variations of diurnal rhythm and psychomotor retardation—in American patients was 48 percent and 65–71 percent, respectively, and therefore are not too well correlated. In Afghan patients the incidence of hallucinations was 33 percent, while in the American patients only nine percent reported this symptom. However, in an earlier study Rennie (15) reported that 25 percent of patients with severe depressions had hallucinations. The high incidence of hallucinations in the Afghan patients may have been due to the long duration of the disease, leading to physical debilitation. The frequency of delusions in the two studies appeared to be comparable (16 percent as opposed to 19 percent).

Of the symptoms that presumably are not biologically determined, the incidence of crying spells in the two studies was quite dissimilar (78 percent as opposed to 61 percent). The higher frequency of crying spells in the male patients in my study was somewhat surprising, because in Afghan culture crying is shameful for a man but condoned in a woman. Whenever a boy cries because of a hurt he has received, he is admonished to stop since "only girls cry." This cultural sanction against crying is not unlike that seen in American culture.

Of the other two categories of symptoms—guilt feelings and suicidal thought and tendencies—the incidence of guilt feelings in this study was similar to that in the American report (39 percent versus 32 percent, respectively). In this regard Murphy and associates (1) proposed that the higher incidence of guilt feelings in Western cultures was due to religious differences. Since Islam, like Judaism and Christianity but unlike Buddhism, Hinduism, and the African religions, seems to stress the idea of sin, the differences that Murphy and associates pointed out are probably not applicable in this case. Fakhrel-Islam (16), in a study of depressed Christian and Moslem patients in Cairo, found that the frequency of guilt feelings in the two groups was similar. In both groups those with a higher education seemed to have more guilt feelings than illiterate patients. In my study, class as well as education also appeared to be important in the incidence of guilt feelings in the patient; those from a higher social class showed more guilt feelings.

Suicidal thoughts, attempts, or intentions were much less frequent in Afghan patients than in patients in the West. Gobar (17) reported one of the lowest suicide rates in the Afghan population (0.25/100,000). Since a large number of Afghans who are depressed never reach medical facilities and are never followed up, Gobar was not able to ascertain the incidence of suicide in the depressed. With the meager data available, it may be safe to assume that the frequency of suicide is low in the depressed patients of Afghanistan. It is generally true that suicide rarely occurs without suicidal thoughts; hence it would seem that the frequency of suicidal thoughts would provide some information on the risk of suicide in these depressed patients. Although death wishes were fairly common in the Afghan patients, only 20 percent had suicidal thoughts, as compared with 55 percent of the American patients studied by Baker and associates (14). Eleven percent of the Afghan patients had expressed suicidal intentions and could probably be included in the group of patients with suicidal thoughts, bringing the total in that group to 31 percent. In only one patient was a suicidal attempt the reason for admission, while Winokur and associates (6) found that 13 percent in their study had been admitted for a suicidal attempt. One other symptom for which the patients in the two studies were dissimilar was obsessive thoughts. This symptom occurred with much greater frequency in the depressive Afghan patients (58 percent) than in the American patients (six percent). No data were available on whether these obsessive thoughts developed de novo during the depression or existed in the premorbid period.

A question that may arise is whether it is valid to compare two studies that may be disparate in the type of patients as well as in the data-gathering techniques. There is no doubt that better and more tightly comparable studies could be carried out in order to delineate similarities and dissimilarities in the clinical aspects of depressive illness in different cultures. In this study, although not satisfying all the criteria for a good cross-cultural comparison, I have attempted to show that the incidence of certain biological, as well as psychological, symptoms of depression in Afghan patients is comparable to the same symptoms in patients from a Western culture.

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Quaalude Alley: A One-Way Street

BY T. PETER BRIDGE, M.D., AND EVERETT H. ELLINWOOD, JR., M.D.

Methaqualone (Quaalude), a nonbarbiturate sedative, was introduced to the American public as a nonaddicting drug with low abuse potential. Unfortunately, it has become the newest drug of abuse. The authors outline the effects of the drug and discuss two patients who had adverse effects after abusing Quaalude. They stress the need for tighter controls on nonbarbiturate sedatives.

During both conventions (Republican and Democratic), Flamingo Park was known as "Quaalude Alley" in deference to the brand of downers favored by most demonstrators. Quaalude is a mild sleeping pill, but—consumed in large quantities, along with wine, grass and adrenalin—it produces the same kind of stupid, mean-drunk effect as Seconal (Reds). The Quaalude effect was so obvious in Flamingo Park that the "Last Patrol" caravan of Vietnam Vets . . . refused to even set up camp with the other demonstrators . . . . The last thing they needed was a public alliance with a mob of stoned street crazies and screaming teenyboppers.

—H.S. THOMPSON (1, p. 44)

WITHIN THE LAST SIX MONTHS "Quaalude Alley" has come to the Durham, N.C., area. Methaqualone (Quaalude, Sopor, Somnafac, Parest) is repeating a pattern familiar to those acquainted with the history of nonbarbiturate sedatives. Reports from all over the United States are quickly labeling methaqualone the newest drug of abuse (1–3).

For those who have watched the development of nonbarbiturate sedatives or who have watched the history of methaqualone in other countries the story is not surprising—only disappointing. It is disappointing that once again a drug classified as a nonbarbiturate sedative has been introduced on the American market as nonaddicting and with low abuse potential (4) only to be proven otherwise. Essig, in 1964, reported the history of such sedatives as glutethemide (Doriden) or methyprylon (Noludar), which were hailed as nonaddicting when they first entered the marketplace (5). This claim proved not to be valid.

HISTORY OF METHAQUALONE

The initial history of methaqualone is similar to the history of these drugs. Gujral introduced the drug in the 1950s in India. It has the following properties: 1) hypnotic effects comparable to those of barbiturates, 2) anticonvulsant effects against experimentally induced seizures, 3) antitussive effects comparable to those of co-

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deine, and 4) weak antihistaminic effects (6). The drug has no analgesic effects but does enhance the analgesia produced by codeine (6). Although initially thought to be relatively free of side effects, current reports indicate that hangover, dizziness, urticaria, and paresthesias can occur when the drug is used (6). Kessell also reported that epistaxis, menstrual disturbance, tongue changes, dryness of the mouth, depersonalization, and cracking at the angles of the mouth have occurred (7).

Although the manufacturers claim that methaqualone (in contrast to the barbiturates) does not suppress the dream stage of sleep, or rapid eye movement (REM) sleep, Kales and associates have brought this claim under question. This group showed not only that methaqualone (300 mg.) produced REM suppression, but also that REM rebound occurred upon withdrawal of the drug (8). This group had previously shown this suppression and rebound to be characteristic of drugs of dependence (8, p. 223). The *Medical Letter on Drugs and Therapeutics* stated that no clinical consequences of the suppression of REM sleep by sedatives have been shown and that drugs such as methaqualone should continue to be judged by the traditional properties: "rapidity of sleep induction, total duration of sleep, hangover effects, addiction and abuse properties, and toxic properties" (9). Notably lacking among these studies have been any published results of animal toxicity research. We were unable to locate any such studies, and inquiries at the manufacturers only produced the reply that "in-house" studies have been made that did not show abstinence syndrome. These reports were not published (10).

At approximately the same time that methaqualone was introduced in this country, several articles appeared in the British literature reporting addiction to and withdrawal symptoms from methaqualone. In 1966, Madden reported four cases that met three of the four criteria of the World Health Organization for drug dependency of the barbiturate type (11). It was unknown in these four cases whether or not the patients showed abstinence syndrome upon withdrawal of the medication. In 1967, Ewart and Priest reported the case of a 47-year-old man who showed withdrawal symptoms after the abrupt cessation of excessive amounts of methaqualone (60 150-mg. tablets per day) (12). In 1969, DeAlarcon reported an increase in the abuse of methaqualone, especially among former heroin addicts who reported enjoyment of the "buzz" they received from the drug (13).

Two patients who were recently seen at the Duke Medical Center emergency room seem to follow the pattern suggested by these earlier British articles.

CASE REPORTS

Case 1. A., a 41-year-old unemployed man, appeared at the emergency room in an anxious, agitated state. He admitted to alcohol abuse of two weeks' duration (a fifth of wine per day), which was confirmed by his family. A mental status examination revealed that he had difficulty with recent memory; he was oriented as to person, place, situation, and space but not to time. No hallucinations or paranoid ideation were present. With his family's cooperation, he was detoxified on an outpatient basis using chlordiazepoxide. Upon follow-up examination, the mental status abnormalities noted had cleared. During this exam, it was learned that the patient had been abusing Quaalude (up to ten tablets a day) for approximately three months and had discontinued this approximately one week prior to his initial contact with the emergency room. He stated that the cause of his drinking binge was related to his failure to maintain adequate supplies of Quaalude.

Case 2. B., a 37-year-old female musician, appeared in the emergency room in a semi-stuporous state after a motel operator found her talking "crazy talk" on the phone. A small shopping bag full of medications brought with her contained pentazocine (Talwin) and Quaalude (the only centrally active drugs present in the collection). Blood assay revealed detectable nontoxic levels of barbiturates. A long history of drug abuse was confirmed by the patient's family. Hospitalization was declined by both the family and the patient on the basis that previous psychiatric hospitalizations at a university center "hadn't done any good." The patient had been diagnosed as a borderline personality during this hospitalization. The patient was observed overnight in the emergency room and released the next day in a stable condition. She stated that she used Quaalude and barbiturates interchangeably and often simultaneously to escape discomfort in her life.

DISCUSSION

Among a group of casual drug users, both men and women, known to the clinic staff at this hospital, a brief survey was conducted concerning methaqualone. This population consisted primarily of college-age students. Of a total of 26, 17 responded that they had used the drug, and it was exclusively known to them as Quaalude. All had been introduced to the drug by friends within the past six months. The number of uses varied from one to ten. The sources for this medication were listed as friends (i.e., street purchase), family doctor, and student health service. All of the subjects described the sensations produced by the drug as pleasant, with one exception. This latter subject listed nausea and a feeling of generalized discomfort. The others listed such feelings as "buzz," "rush," "really drunk," "peaceful," "calm," "staggering," and "happy." One of them replied: "It's a great low calorie drink—you don't have to pump yourself full of booze." The majority of those familiar with the drug believed it to be easily available but not widely known to the student population *yet* (their emphasis). By admission, drug use among this population included marijuana, amphetamines, barbiturates, and lysergic acid diethylamide.

The previously mentioned reports concerning the experience in Durham and apparently throughout the United States currently indicate that methaqualone has become another drug of abuse. Despite supposedly tight Food and Drug Administration controls, methaqualone was introduced as a nonaddicting drug after reports had appeared warning of both the abuse potential of any drug of the nonbarbiturate-sedative classification (6) and of the abuse potential of methaqualone in particular (14). It is our belief that by now sedatives should be considered

"guilty" of addiction potential until proven otherwise, and that this proof—1) development of tolerance, 2) abstinence syndrome upon withdrawal of the drug, and 3) continued use by animals that are tolerant to the drug when self-administration devices are made available—should be made in the laboratory, not on the street.

Quaalude Alley is a one-way street to tighter controls such as the English have imposed (15). Once again they have preceded us with methaqualone, both in use, in abuse, and, one hopes, in control.

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Participatory Management in Psychiatry

BY DAVID E. RASKIN, M.D.

In psychiatry, the concept of participatory management has been developed in the therapeutic community and elsewhere. The industrial management literature reveals that, although scientific management and human relations theorists saw no necessary conflict between management and worker, more recent writers have noted great conflict between organizational and individual needs. The author attempts to translate the industrial experience to psychiatric bureaucracies and highlights the basic conflicts between participatory management and authority, responsibility, and conflicting value systems.

PARTICIPATORY MANAGEMENT is a principle of therapeutic communities, psychiatric hospitals, and community mental health centers. In education, educators and students are engaged in the planning of both secondary school and university programs. Community action groups are demanding greater participation in education and in health. In psychiatry the question of resident participation in program planning and evaluation is very much with us. This paper will consider certain problems inherent in participatory management and will particularly focus on data from the business community and the psychiatric ward.

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The therapeutic community concept developed out of the World War II experience of psychiatrists' needing to find rapid and effective ways of handling large numbers of patients. The moral treatment (1) of the nineteenth century was certainly an early form of the therapeutic community. Such communities vary in terms of value systems and specific approaches. I will focus on the ideas of Maxwell Jones (2–5) in this paper since he is one of the major proponents of the therapeutic community, particularly with regard to participatory democracy.

Jones (2) listed the following goals for a therapeutic community: 1) active rehabilitation as opposed to custodialism and segregation; 2) democratization in contrast to old hierarchies and formalities of status differentiation; 3) permissiveness in contrast to stereotyped communication and behavior; and 4) communalism as opposed to specialized staff roles limited to the doctor.

Jones has written extensively about leadership and decision making by consensus. "In a therapeutic community communications at all levels are made as efficient as possible, and decision-making by consensus is aimed at. Unilateral decision in any important matter affecting other people is avoided" (5, p. 24). So ideally, the therapeutic community, as conceived by Jones, involves an attempt to maximize the democratization of communication, leadership, and decision making in the interest of psychological growth of patients and of staff.

APPROACHES

The search for effectiveness and efficiency in organizations gave rise to the classical theory of administration (6). This "scientific management" approach saw workers as motivated by economic rewards and the organization as characterized by a clear division of labor, specialized personnel, and a hierarchy of authority. Arising as a reaction to the scientific management approach was the human relations school (6). Human relations emphasized the emotional, unplanned, nonrational elements in organizational behavior. It also pointed out the need for communication and for the participation of workers, and the importance of leadership. The classical approach recognized no conflict between man and organization. It assumed that what is good for management was good for the worker, that higher efficiency leads to higher profits, which lead to higher wages and greater worker satisfaction. The human relations approach, on the other hand, pointed out that workers have many other needs and that if management paid attention to the cultural and social needs of the workers, this would lead to increased worker satisfaction and productivity.

Both the scientific management and human relations approaches saw no necessary contradiction between the needs of the worker and the needs of the organization, although each school placed a different emphasis on what should be done to maximize organizational needs and worker satisfaction.

The structuralist approach (6) is a synthesis of the classical school and the human relations school, drawing on the work of Weber and Marx as well. The structuralists recognize inevitable strains between organizational needs and personal needs, between rationality and nonrationality, and between formal and informal relations. The structuralists in addition studied hospitals, prisons, churches, armies, etc., as well as business and industrial organizations.

The human relations school has indicated some ways in which frustrations may be reduced, but structuralists insist that there are limits to the degree to which this can be achieved: A sense of community, primary relations, and communication blocks are important but are not complete substitutes for material rewards. Management has been criticized for attempting to provide inexpensive symbols of prestige and affection instead of an increase in wages. What can be created is a false sense of participation in decision making when, in fact, a decision has already been made and the real purpose of a conference is to get those who are lower in rank to accept that decision.

So in addition to the concern about the inappropriate use of human relations concepts, the structuralists feel that the human relations group focuses on a narrow range of variables (i.e., informal relations) without considering their relationship to formal organizational structure; overemphasizes the importance of informal work groups; underemphasizes the relationship between organization and environment; and overemphasizes social rewards and underemphasizes material rewards. For example, in a recent article Henshel (7) stated that "... those who are determined to automate and institutionalize the corporate presidency often overlook the fact that no committee or formula is able to make the kind of subjective evaluation that a president must make when he decides on a major course of action.... There can be endless debate on how a thing is to be done; but there can be no final sharing of the decision on what is to be done." This is up to the president.

Maslow stated:

> The relationship of the boss to the people whom he might have to fire or punish is, if we are realistic about it, not a friendly relationship among equals. Our attitude toward anyone who has power over us, even if it is the most benevolent power is different from our attitude toward those who are equals.... The facts do seem to support participatory management in so far as the culture is good enough, the people involved are psychologically healthy, and the general conditions are good (8).

Gomberg wrote:

> Democratic management of industry has become a modish philosophy shared by avant-garde students of the American industrial enterprise.... Benevolent autocrats operating within a competitive institutional framework seem to provide the most effective combination of economic achievement and political restraints. Industry's democrats have confused a benevolent paternal style of velvet-gloved autocracy with democracy (9).

CONFLICTS

It is evident that feelings are still strong about the issue of participatory management. Some still see it as a panacea; others, as a hoax; and many as a partially attainable goal but not without a great deal of conflict. A recent experimental study (10) concluded that a strong positive association between group collaboration and organizational performance remains to be demonstrated.

In psychiatry the current wave of participatory management, role blurring, decision making by consensus, and multiple leadership represents a human relations approach. Maxwell Jones, a human relations theorist in terms of psychiatric organizations, nevertheless recognizes the pitfalls and writes about them. He states, for example:

> In theory one tends to postpone action until such times as consensus has been achieved. Sometimes this is quite impractical, particularly in crisis situations, when sanctions appear to be called for—at least in the opinions of some members. The important thing is that a delay should not be at the cost of the over-all feeling of security within the hospital community. Any society needs to feel that there are ultimate sanctions that will be invoked—irrevocably if required. Without such a belief, backed up by actual demonstration, society, or at least some of its insecure members would anticipate anarchy (5, p. 65).

Jones goes on to say: "No matter how democratic and equalitarian the social structure of a therapeutic community may be, there is never any doubt that the ultimate authority rests with the psychiatrist. Whether he uses this authority in making unilateral decisions will depend a great deal on the circumstances" (5, p. 66).

> [The] question of elaborating the role of a patient to one of therapist is, I think, one of the fundamental tenets of therapeutic community procedure. This concept is often mistakenly seen as handing over ultimate responsibility to the patients. This, in my opinion, is not practicable and what one wishes is to give the patients optimal responsibility compatible with their overall capacity at any one time, and in no sense does the staff or the doctor in charge relinquish his ultimate authority which merely remains latent to be invoked when necessary (4, pp. 691–692).

Although Jones would like to promote the ideas of participatory management and patient participatory responsibility, he nevertheless inserts qualifications in his writings. In the "crunch," participatory management needs to be discarded, and the doctor who is ultimately responsible decides. There is not enough talk in community mental health centers, psychiatric hospitals and wards, and departments of psychiatry about these unavoidable conflicts in the free use of participatory management.

Inevitable conflicts must exist in psychiatric organizations; participatory management is not a panacea. There are always issues of authority, responsibility, and conflicting value judgments. Charismatic leadership can create the impression that there is really a participatory democracy. Often, this represents the followers' need to please the leader and to adhere to his values and philosophy. Decision making by committee is useful, but some issues are not the kind that can await committee decision or patient staff decision, and in such cases the leader steps in. Participatory democracy in psychiatry should not hide the fact that such people as nursing assistants are horribly underpaid, poorly trained, and without viable career ladders. These issues affect morale and efficiency and are not going to be solved by participatory management.

The self-actualization theory is one aspect of motivation for some human beings but is not translatable to *the* motivating force in a psychiatric hospital or community mental health center. Some people want to be told what to do; some patients and staff members are unable to accept the role of management equal.

The structuralist concept of inevitable conflict within an organization is most relevant to psychiatric systems. Problems of the articulation of formal and informal structure, of material versus social rewards, of the use of human relations approaches to placate nursing assistants, and of differences in salary, education, power, and responsibility cannot be hidden or solved by patient-staff meetings or by ward sensitivity groups.

But the outlook is not bleak. There is a conflict between participatory management and institutional efficiency. Nevertheless, communication systems can be vastly improved, even if decision making is not always shared. Some areas are fruitful for participatory management; others are not. These should be spelled out. What we need to avoid is the promise of participatory democracy without being able to deliver it. If we recognize the conflicts, are honest about them, and attempt to deal with them in hospitals, mental health centers, and departments of psychiatry, all those involved may benefit.

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Sandor Rado
1890–1972

Dr. Sandor Rado, pioneer psychoanalyst and psychiatric educator, died in New York City on May 14, 1972, at the age of 82.

Dr. Rado received his first university degree, Doctor of Political Science, in Hungary at the University of Budapest at the age of 21. However, late in 1910 he read a pamphlet about Freud and psychoanalysis by Sandor Ferenczi. This new concept, together with his dissatisfaction with the social sciences, led him to enter medical school. He joined Ferenczi's study group, which was soon organized as an official psychoanalytic society, and he was active in psychoanalysis for the rest of his life.

Dr. Rado graduated in medicine in 1915 and was certified as a specialist in psychiatry in 1923, at which time he was invited to become a member of the faculty of the newly formed Psychoanalytic Institute in Berlin, where he remained until 1931.

In 1931 Dr. Rado was invited to New York City as the first educational director of the newly formed New York Psychoanalytic Institute. He remained in this post until ideological differences with some of the tradition-minded members of the education committee led to his departure in 1941. Almost immediately he began planning a new psychoanalytic training center. In 1944 he was appointed clinical professor of psychiatry and director of a newly established psychoanalytic clinic for training and research in the Department of Psychiatry of the College of Physicians and Surgeons of Columbia University, where he served until his retirement in 1955. With the creation of this institution as part of the medical school in a major university and its associated clinical facilities, Dr. Rado approached an ideal for psychoanalytic education and service that he had gradually evolved: that psychoanalysis must be a part of the medical curriculum; it must fulfill the criteria of biologic science in its theoretic methodology and, most importantly, have access to the fullest clinical facilities and maintain close cooperative liaison with all other behavioral or biologic sciences.

He foresaw that the future of psychoanalysis and psychoanalytic education depended on a transition from its origins in theoretic and clinical insularity to administrative integration and cooperative daily function with the body of medical, educational, scientific, and clinical institutions. Scientific discipline and scientific cooperation were necessary ingredients of psychoanalysis.

Dr. Rado ignored retirement and in 1956 founded his fourth center of graduate training in psychoanalysis as the New York School for Psychiatry, from which he retired as dean emeritus in 1967.

Dr. Rado revised a number of the original theories of Freudian psychodynamics on the basis of careful clinical research, but while a brilliant theoretician he was known best as an exciting and stimulating teacher, the most stimulating I have ever known.

Henry Adams said, while Dr. Rado was still in college, "A great teacher affects eternity—he can never tell where his influence stops."

JOHN M. COTTON, M.D.

LETTERS TO THE EDITOR

The Responsibilities of Psychiatry to Medicine: A Debate

Editor's Note: An unusually large number of letters has been received in regard to Dr. George Engel's editorial "Is Psychiatry Failing in Its Responsibilities to Medicine?" (June 1972 issue). To save space and to avoid repetition we have abstracted the letters below.

SIR: In his editorial Dr. George Engel called attention to a problem that has been troubling many psychiatrists. He questions the right of those who decided to eliminate the requirement of an internship for psychiatric training programs and calls upon those who share his concern to let their voices be heard.

I was a member of the Residency Review Committee at the time it recommended elimination of the internship requirement. I felt that many questions had not been adequately considered. For example, should psychiatric residents be proficient in physical examinations and in detecting or recognizing organic disease, and should they have some competence in treating organic disease? Should they have this proficiency before they start, during, or on completion of their psychiatric training? If such proficiency were present on starting psychiatric training, what test would be used to ascertain or measure it? Could graduation from medical school or medical licensure be used as the criterion? To what extent is there variation from one school to another? How much knowledge of the basic medical sciences and of other clinical specialties should be expected of a beginning trainee? What are the essentials of an internship that are supposed to be covered by training programs which accept trainees without internships?

Traditionally, psychiatrists have pointed to their medical backgrounds and competence as the major features that distinguished them from psychologists, social workers, and other emerging allied mental health professionals with whom they are increasingly equated by the public and by psychiatrists themselves. Psychiatrists can rely on this distinction only to the extent that they continue to see themselves as physicians rather than as just psychotherapists. The question repeatedly arises whether it is necessary or wise for the psychiatrist to spend all the time he does in his medical training, his internship, and his residency if he is going to end up doing essentially what others with much less training are said to do equally well.

The roles of the psychiatrist and allied mental health professionals have become so blurred that there is some uncertainty about psychiatry's viability as a medical specialty. It is of interest that *Time* magazine no longer includes psychiatric news items under the section "Medicine." They are now in a new section called "Behavior." Dr. Engel's question, "Is Psychiatry Failing in Its Responsibilities to Medicine?" might well be rephrased, "Does psychiatry regard itself as a medical specialty or as something else that is health-related but not medical?"

NORMAN Q. BRILL, M.D.
Los Angeles, Calif.

SIR: Dr. Engel's comments concerning psychiatry's movement away from medicine are timely and sadly accurate. I, too, feel disturbed by what seems to be a growing tendency within our profession to look upon anything that smacks of medicine or of the "medical model" as bad and upon anything with "human services" in its title as good. I question the wisdom of a federal effort to support health care that provides millions of dollars for sometimes ill-defined services, while funds for training and crucial research are being cut to the bone. Further, I am dismayed when I hear medical colleagues in other fields complain, "You psychiatrists are no longer interested in working with sick people, but who do we get to help us with our patients?"

Because I share Dr. Engel's concerns, I feel it is most unfortunate that he has causally linked the issue of the extinction of the internship with the need for a holistic approach to patient care. The abandonment of the internship requirement was an action taken in response to the severe shortage of health manpower in our country and with the expectation that the long-overdue revision of medical curriculum would occur. Many hoped that this decision would allow all of medical education to be seen as a continuum and that the artificial boundary between medical student and novice physician would be largely eliminated.

Few can challenge the necessity of a physician's receiving broad clinical training and of his having experienced primary responsibility for a variety of patients before embarking on a course of specialty training. Breadth of diagnostic vision, a holistic approach to patient care, maturity of judgment, and self-confidence, tempered by the appropriate acceptance of one's limitations, are direct benefits. This experience should never be eliminated from a young physician's education.

But to imply that the internship is the only opportunity for such responsibility is an argument predicated more upon structure than upon substance. The issue is, rather, why has it been so difficult for curriculum committees of medical schools to provide the generic medical student with a variety of primary clinical responsibilities. Is it perhaps because patient-hungry specialist residents are leaving an insufficient amount of clinical material for students? Or is it because too many distinguished educators have been digging their heels in against any change in curriculum rather than working toward the development of a more realistically *integrated system* of medical education?

JAMES S. EATON, JR., M.D.
Washington, D. C.

SIR: Dr. Engel's editorial is appropriate and timely. The ruling that one can go from medical school into a psychiatric residency has been bothering me for some time. One of my fears was recently realized in working as a psychotherapy supervisor with a second-year psychiatric resident who entered his residency directly from medical school. He was quite inadequate when, like all other psychiatric residents, he was required to carry out the duties of a licensed medical doctor. Having had practically no clinical experience, he daily found himself in spots in which he did not know how to respond effectively. Because of this, he was unable to perceive the reality of the therapeutic situation.

This young man grasped at every new idea placed before him by the school of psychiatry, gave himself no time to test any of

these, and ended up feeling inept, but defensive. I believe he will continue to have great difficulty working with people in a therapeutic manner. I feel sorry for him and for psychiatry. I presume that this mistake will be repeated many times and that psychiatry will lose in the long run.

As a viable part of medicine, psychiatry should utilize and be utilized by all of medicine. Without experience in general practical medicine the psychiatrist cannot be the doctor who can treat the whole person. I feel that psychiatry should continue to require at least a year's rotating internship before the psychiatric residency.

KENNETH E. GODFREY, M.D.
Topeka, Kans.

SIR: Dr. Engel's editorial is indeed very provocative. It appears to me that Dr. Engel has already concluded that the psychiatrist of tomorrow who received Board certification without the requirement of an internship is a liability instead of an asset to APA. This is like a verdict without a trial.

Nowadays, unless one is going into general or family practice, a straight internship is the choice for the specialty minded. It would be beneficial for an aspiring psychiatrist to be exposed to the various medical specialties before completely devoting himself to his discipline, but would a straight psychiatric internship do it? What, then, does an ambitious physician lose by going directly into a psychiatric residency?

If the physician is fully aware of his responsibilities as an M.D., he should "approach the problem of the patient before him in a holistic manner, regardless of his special discipline." Medical educators should see to this before giving him his M.D. degree.

ARISTIDES E. PENETRANTE, M.D.
Buffalo, N.Y.

SIR: The vexing nature of the relationship between psychiatry and the rest of medicine seems to have left the arena of intellectual challenge and investigation and entered a political field guided by intuition and faulty reasoning. Dr. Engel's editorial aptly points out the hazards of the current approach. He raises a number of questions about how such a major decision as the abandonment of the internship requirement could be made in the absence of complete discussion and debate. Further questions could also be raised. What evidence was cited in making such a decision? What experiments were performed? What evaluations of psychiatrists' skills took place?

The advocates of eliminating the internship requirement have probably correctly diagnosed what is wrong with psychiatry but have prescribed the wrong treatment. By examining what many psychiatrists do in their day-to-day work it became obvious that much of it had nothing to do with medicine and that traditional medical education was inappropriate for these people. Thus, by changing the education a psychiatrist would receive it would be possible to make his training conform to what he does. But such an approach misses the point (as Engel indicates) that what is wrong with psychiatry may well be that psychiatrists often do not practice medicine. The cure for this is to encourage psychiatry to continue to identify with medicine.

A closer look at the people who fail to see the hazards of our current direction might well reveal a large number of psychiatrists who entered the profession as an escape from the responsibilities of medicine without a loss of prestige or financial recompense. Many trained during an era when intensive psychotherapy was exalted and psychiatric residents rarely entered the medical or surgical wards of their hospitals. Some of them have risen to positions of sufficient power to influence the future direction of our profession but are doing so from a base of narrow, nonmedical personal experience.

Ironic as it may be, just as psychiatry appears to be entering adulthood and the need for our talents as physicians is the greatest it has ever been, we are threatened with a retreat, or at least a failure to continue to grow.

ARNOLD WERNER, M.D.
East Lansing, Mich.

SIR: As a young psychiatrist, I was moved by Dr. Engel's editorial. Dr. Engel senses something wrong with contemporary psychiatry, and in this he is quite right. However, he chooses to view the abandonment of the internship as the "single" important factor in the separation of medicine and psychiatry.

I do not believe that Dr. Engel realizes that today's established psychiatrists are the physicians who elected to adopt a mind-body dualism in psychiatry and who abandoned treating the whole person in favor of abstract, intellectual ideas on mental processes. Today many well-established psychiatrists are the greatest abusers of psychotropic agents, being unaware of their pharmacology, toxicology, and interactions with other drugs.

One hopes that it will be the young psychiatrists who can properly use psychotropic medications, counteract drug side effects, treat intoxications, and relate organic disease to altered emotional states. We must also be trained as specialists in many forms of psychotherapy by means other than the basic psychoanalytic concepts that have so separated psychiatry from general medicine and surgery.

I suggest that concerned men like Dr. Engel devote their energies to producing basic, well-rounded, commonsense psychiatric residency programs where the important types of psychotherapy and psychopharmacology and their relationship to general medicine can be taught in a comprehensive and practical manner.

I believe that the correlation of these concepts with clinical work in areas where medical specialists are urgently seeking assistance from psychiatrists is more valuable than a year of starting I.V.s, drawing blood gases, and changing bandages.

However, I do appreciate Dr. Engel's keeping this important subject alive; it is only through the interchange of ideas that we can improve the standards of psychiatry and maintain it as an essential, integral part of medicine.

ROBERT T. LONDON, M.D.
New York, N.Y.

SIR: I am writing to express my support for the position taken by Dr. Engel in his recent editorial that deplores the dropping of the internship requirement. I share his views, as well as those of Dr. John Romano ("The Elimination of the Internship—An Act of Regression," May 1970 issue) on the same subject. I am hopeful that the decision will be reversed.

JAMES C. BECK, M.D., PH.D.
Cambridge, Mass.

SIR: As a former student of Dr. Engel's and as one who has carefully weighed his advice, as well as that of Dr. John Romano ("The Elimination of the Internship—An Act of Regression," May 1970 issue), before deciding to enter a psychiatric

residency without an internship, I feel obligated to answer Dr. Engel's questions about psychiatry's responsibilities to medicine. I share many of Dr. Engel's concerns about the importance of teaching the psychosocial approach in medicine to counteract medicine's growing impersonality and of studying psychosocial problems and the role of psychosocial factors in disease. However, to blame any real or imagined failings in these areas on the elimination of the internship is obviously illogical, since this change is so recent that the number of psychiatrists who have finished training without an internship is minuscule. The point, as I see it, is that medical internships are no longer devoted to the care of the sick, but rather to learning about diseases. Perhaps one place to stress the importance of psychosocial forces would be to humanize the internship experience.

Dr. Paul Griner and I expressed concern that clinical skills in evaluating and treating patients have been hampered by reliance on laboratory tests at the expense of clinical data (1). Medical schools provide plentiful opportunities for students to become actively involved in caring for sick patients. Unlike Dr. Engel, I see no contradiction in physicians who are primarily interested in the psychosocial aspects of medicine proceeding directly to that.

Dr. Engel avoids the fact that all of the areas which he is concerned about and to which he has devoted his professional life are only part of psychiatry. Psychiatry's primary obligation is to deal with the emotional well-being of individuals and groups and, as such, we are as much a part of the mental health disciplines as of medicine.

Finally, I would suggest that rather than engaging in futile calls to action in order to hold back the winds of change, Dr. Engel now has an opportunity to test some of his hypotheses by randomly accepting some residents at the University of Rochester who have not had an internship and seeing if, indeed, there are measurable differences during residency, as well as during later life.

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BENJAMIN LIPTZIN, M.D.
Charlottesville, Va.

SIR: I was most encouraged by Dr. Engel's brief, but excellent, editorial. I think psychiatry has failed medicine in several ways.

It was a bad mistake to drop the internship requirement for residency training in psychiatry. This is where the new physician discovers what it means to be responsible for the lives and health of others.

Our greatest failure to medicine is the apparent failure of many to realize that the concepts guiding the psychiatrist should be the same as those guiding other physicians. This failure has taken the specialty far afield from medicine.

HAROLD M. VOTH, M.D.
Topeka, Kans.

SIR: Dr. Engel's opinion regarding psychiatric training deserves the urgent attention of all psychiatrists. It should create a thrust to bring psychiatry back to where it belongs—to medicine.

If psychiatry is to remain a "branch of medicine," we psychiatrists must retain our birthright as physicians. A general internship uniquely teaches the future psychiatrist the unity of mind and body, the interactions between organic and emotional factors, the importance of listening to a patient's complaints, and to see the patient as a member of his family or to recognize his aloneness in the world and its implications.

The general internship is not a waste of time for the would-be psychiatrist but a necessary learning and life experience. If we study the history of psychiatry, it becomes evident how inseparable psychiatry and medicine are and how this unity enables us to alleviate suffering always and to cure sometimes. If we want to retain our M.D. degree, we must earn it by remaining physicians who specialize in psychiatry.

MANFRED BRAUN, M.D.
New York, N.Y.

SIR: Dr. Engel, in his well-documented and lucidly reasoned editorial, deplores that "the American Board of Psychiatry and Neurology has decreed in effect that the traditional year's experience in the care of the sick, as exemplified by the internship, is a waste of time for the would-be psychiatrist."

This "decree" is strange doctrine indeed after all the years of growing emphasis on the holistic approach and when physicochemical, psychosomatic, and somatopsychic elements are increasingly being recognized as inseparably associated with functional and conditioning factors.

Nothing can take the place of the demands on clinical judgment and observation and of the dramatic human impact of medical and surgical wards. In his internship the medical graduate has the opportunity to evaluate the effects of medications; to see the physical effects of disease, the inherent trauma and possible complications of necessary surgery, and the possibilities of iatrogenic symptomatology; and to face firsthand the emotional reactions of patients to illness and the reactions of the patient's family and friends, as well as his own. If these matters are not of vital concern in psychiatry, what is? Where else can a young person feel and see them so vividly as in his internship, and with such comparative safety to his patients?

After over 40 years in the practice of psychiatry, I am convinced that a young doctor can experience in his internship the most valuable and informative period of his medical life and that there he can lay the best foundation for a career as a true doctor of medicine, whatever his specialty may become.

JOSEF A. KINDWALL, M.D.
Milwaukee, Wis.

SIR: Dr. Engel's final sentence concerning the need for action by those who feel that psychiatry should remain a field of medical specialists must be accented over and over again. It is good that Dr. Engel is willing to become the rallying point, since he is known and respected for his outstanding contributions to medical practice and education.

I wish to support fully Dr. Engel's objection to the general trend toward a reduction in the time and intensity of education for the future psychiatrist. The decision to remove the internship requirement will have a greater effect on psychiatry than on any other branch of medicine. As chairman of a department of psychiatry, I strongly feel that I should have had some input into this far-reaching decision, and I trust that others concerned with the education of future psychiatrists will attend to Dr. Engel's plea for action before it is too late.

JAMES L. MATHIS, M.D.
Richmond, Va.

SIR: Dr. Engel's editorial came as a breath of fresh air and good sense. I have been increasingly aware of the impending demise of psychiatry as I watch nonphysician therapists take over and as I listen to our young residents sophomorically disparage the medical model. There is no doubt in my mind that unless we identify ourselves as doctors of medicine first, we are doomed as a discipline.

I see no conflict between the medical model and the psychoanalytic, dynamic, behavioral, ego psychologic, or holistic models. The medical model, being biologic, does not preclude conceptualization of the mind in any of these accepted theories of human behavior.

Therefore, with Dr. Engel, I demand a return of the internship. I agree wholeheartedly that the care of the sick is our primary responsibility. I would like to add that our specialty probably demands more strength and maturity than any other. There is no substitute for the personal growth a young person experiences as he practices medicine as a fledgling and feels the weight of birth, disease, and death on his shoulders. These are the basic burdens of psychiatry, and the young psychiatrist must have handled them all before he is ready to handle his patients' problems. Ours is not work for weaklings or for the immature.

KERMIT H. GRUBERG, M.D.
Berkeley, Calif.

SIR: Dr. Engel made the strong point that the failure of psychiatry in its responsibility to medicine was most obvious in the decision of the American Board of Psychiatry and Neurology to abandon the requirement of the internship year. I agree with Dr. Engel in every particular. I further suggest that we consider taking a referendum among the members of APA to examine their opinions.

A. RONALD SORVINO, M.D.
Short Hills, N.J.

SIR: While I do not agree with every point that Dr. Engel makes, I do agree that the loss of the internship is a significant one in the education of psychiatrists. Although I have not had a chance to work with a psychiatrist or resident who has not had an internship, I consider my experience as an intern in a city hospital, and as a general medical officer in the Navy, to have been valuable. These experiences were important along three lines.

1. They helped me develop a working knowledge of medicine—exactly what it is to undertake the management of patients and to become familiar with using drugs and other physical procedures in surgery and diagnosis.

2. They helped me develop judgment about illness—about knowing how sick is sick, how serious a symptom is. This ability could only have been received through direct experience.

3. They helped me develop an understanding of doctors and hospitals and of how medicine is practiced in a hospital and in a community. I could not have been as valuable to physicians and nurses in other branches of medicine had I not had experience practicing medicine as they practiced it. In consulting with other physicians on the staff of nonpsychiatric wards, a knowledge of medicine is invaluable.

Perhaps physicians who choose psychiatry as a specialty will find other ways of gaining the valuable experience I have had as a physician. I believe, however, that we in the profession of psychiatry need to take a serious look at the consequences of the loss of a significant amount of medical experience prior to becoming a psychiatrist.

BEN KUHNER, M.D.
Denver, Colo.

Dr. Engel Replies

SIR: I am grateful to those who are sufficiently concerned about the issues raised in my editorial to address letters to me personally or to the Editor.

First, let me correct the misconception that I ascribe psychiatry's failures exclusively to the abolition of the internship. What I said was that this elimination has "opened the door widely to this decline"; the emphasis should be on the word "widely."

Dr. Eaton follows the posture of the Carnegie Commission that shortening the educational period is essential in order to solve the manpower shortage. Of all the fields, this argument is least credible in the mental health field. For if one accepts the argument that a medical background is not a prerequisite for all types of mental health professionals, then manpower needs can be better met by increasing the training and educational opportunities for nonmedical mental health workers. Places in medical schools should be reserved for those aspiring mental health workers who wish to function as physicians, and they should have a full, not a truncated, medical background. Those who would elect a highly specialized psychiatric-behavioral science track and would abjure other clinical work are dubious candidates for the M.D. degree. The answer lies more in upgrading the quality and prestige of the nonmedical mental health roles than in prostituting the M.D. degree, the attraction of which for some, I suspect, lies in the potential for higher income.

Drs. Eaton, Liptzin, and London all note the poor quality of some internships (to which one might add, of some psychiatric residencies as well). The new requirements expect the residency programs to provide the resident with some general medical experience equivalent to an internship, an illusory prospect at best. The net effect of this will only be that all psychiatric residents will have second-rate internship-type experiences. Obviously the answer is to bring about basic changes in the internship that will focus more attention on the patient and on his illness rather than merely on disease. But who is going to provide the inspiration and the foundations for such changes if not psychiatrists who have experienced these problems firsthand during their internship? This is part of the medical responsibility of those physicians qualified as psychiatrists.

Dr. Liptzin cannot be chided for being uninformed about medical educational patterns of 20 years ago. The fact of the matter is that today in many medical schools students are less, not more, actively involved in caring for patients. And this can only get worse as curricula are accelerated, the ratios of faculty to students and patients to students fall, and students enter their clinical work less well prepared in both basic science and clinical methods. Psychiatrists in particular should appreciate that their professional education is a developmental process. One becomes a physician by working with sick people and by evolving an identity that derives from the professional role. It is the active engagement in the care of the sick that, in fact, constitutes a vital life experience for the would-be psychiatrist. Those who do not feel comfortable in caring for the sick should perhaps have taken another pathway to reach their goal of being a mental health professional.

My questioning the wisdom of the hasty eradication of the in-

ternship is considered by my critics as standing in the path of progress. The decision to suspend the internship requirement was made by a small group of men with a minimum of debate and publicity (1, 2). This is neither scholarly nor democratic. There is legitimate ground for disagreement about whether the decision was good or bad, but there is no ground to defend the way in which the decision was reached. Responsible men would at least have attempted to evaluate the contribution of a medical education, including the internship, to the effectiveness of various types of psychiatric practice. They may well have discovered that for some roles no medical background is needed. Or could it be that the psychiatric establishment, all medical doctors, would rather compromise the meaning of the M.D. degree than relinquish their prerogatives, economic and other? I stand my ground: Psychiatry is the medical discipline concerned with mental health, and psychiatrists must be fully qualified physicians. The mental health field is too large and diverse to be dominated by physicians, especially ill-prepared physicians. And medicine is too important not to be served by psychiatrists who are anything other than highly competent physicians.

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GEORGE L. ENGEL, M.D.
Rochester, N.Y.

"NEW RESEARCH" PROGRAM AT ANNUAL MEETING

Four half-day sessions are being reserved at this year's annual meeting in Hawaii for "New Research" papers. The new research program, an innovation last year, presents "late developing and exciting research findings." Authors will have 15 minutes to present their papers, followed by five minutes of discussion.

Abstracts of papers submitted for this program must be received no later than March 1 by the Vice-Chairman of the APA Program Committee, H. Keith H. Brodie, M.D. APA, 1700 Eighteenth Street, N.W., Washington, D.C. 20009. A complete text is not required. (Special abstract forms *must* be used; they are available from Dr. Brodie at the APA Central Office.)

BOOK REVIEWS

Treatment of the Borderline Adolescent: A Developmental Approach, *by James F. Masterson, M.D. New York, John Wiley & Sons, 1972, 280 pp., $13.50.*

In psychiatry, as in any field of scholarly endeavor, there appears from time to time an article or a book destined to have a significant and lasting effect in shaping subsequent developments within the area to which it addresses itself. At best, such a pivotal work systematizes and codifies clinical data, refines the work of diagnosis, subsumes within its substantives prior concepts once considered essentially unrelated, and provides impetus for further research.

Its unique contribution may comprise the delineation of a discrete, previously unrecognized clinical syndrome, like Kanner's description of infantile autism, or a comprehensive synthetic effort toward carefully documented systematization, like Bleuler's group of schizophrenias. In a very real sense Dr. Masterson's book combines both, central to which is the marriage of sedulous clinical description and a consideration of developmental processes viewed from the perspective of object relations. As such, the book has important implications for the mental health worker that transcend the adolescent phenomena and cases with which it is specifically concerned to also include earlier childhood, adult, and family psychopathology viewed from a developmental standpoint.

The author's delineation of the borderline syndrome of adolescence has proceeded from both theoretical and clinical considerations. It has resulted from a growing conviction, shared by others, that the so-called turmoil view of adolescence applies to but a minority of symptomatic adolescents and the fact that the symptomatic adolescents Masterson studied and treated had been suffering from psychopathology more severe than some sort of phase-specific and time-limited turmoil state or "adjustment reaction." Following consideration of these matters in the first chapter, the author proceeds to a detailed discussion of the complex processes inherent in normal separation-individuation, the etiology of the borderline syndrome based upon failure of these processes, the symptomatic-defensive features of the borderline adolescent, and the central role of chronic, unresolved "abandonment depression" in their evolution.

There then follows a wealth of case material, which, in both content and form of expression, illustrates the author's sensitive and comprehensive approach to the in-depth treatment of the borderline adolescent and his family. It includes definitive discussions of the residential milieu, individual psychotherapy, outpatient therapy, limit setting, joint parent-child interviews, and the use of school, recreational, and occupational therapies within a residential (inpatient) context designed and operated specifically to bring about the long-blighted processes inherent in parent-child individuation and differentiation.

Treatment of the Borderline Adolescent deals specifically with one symptomatically protean group of disturbed adolescents. However, it comprises in addition the most coherent and comprehensive statement to date concerning the intensive residential and outpatient treatment of adolescents, a masterly extension of the author's earlier work on the differential diagnosis of adolescent psychopathology, and a notable contribution to the growing literature on borderline and narcissistic personalities. Finally, it provides important insight into the ubiquity of failure of separation-individuation in the etiology of individual and family, and juvenile and adult, psychopathology. Few mental health workers can afford not to read, consult, and absorb the content of this notable contribution to the psychiatric literature.

DONALD B. RINSLEY, M.D.
Topeka, Kans.

Experimentation with Human Beings: The Authority of the Investigator, Subject, Professions, and State in the Human Experimentation Process, *by Jay Katz, with Alexander Morgan Capron and Eleanor Swift Glass. New York, Russell Sage Foundation, 1972, 1108 pp., $20.*

Recent headlines revealing that treatment had been withheld for many years from 412 syphilitic men jolted many of us from our comfortable nests of complacency, as did the report in 1963 that at the Jewish Chronic Disease Hospital in New York, cancer cells were injected into unsuspecting chronically ill patients. The latter case is included in Jay Katz's latest book, *Experimentation with Human Beings*, which is a major work in the medicolegal field and can easily be used as a keystone for research, interdisciplinary seminars, and lectures on the subject.

Writing in the casebook method, Katz has collected a wealth of material that includes newspaper and magazine articles, unpublished theses, reports of congressional hearings, and transcripts of testimony, as well as appeal-court decisions.

While the problem of organizing a work of this type is obviously difficult, the author and his assistants, Alexander Capron and Eleanor Glass, both young lawyers, have done a superb job. There are four main sections: An Introduction to the Human Experimentation Process, The Authority of the Investigator as Guardian of Science, Subject and Society, The Authority of the Subject as Guardian of His Own Fate, and The Authority of Professional and Public Institutions. Each section is divided into several chapters, each of which is introduced by brief comments and questions to be considered.

How much responsibility should experts have? What is "advised consent" for the African pygmy or the incarcerated criminal? What constitutes "harm"? Are the "obedience to authority" electric shock experiments ethical? How much information should be given to women for whom the Pill is prescribed? Should hybridizing experiments between human and animal cells be allowed? How much "freedom of choice" does one really have? How much freedom can we allow researchers for the purposes of progress? Can we secretly record juries? These are only a few of the questions that can be raised regarding the issues of human experimentation.

As our world becomes smaller and more affluent, we must look at these issues and make certain decisions or, at the very least, open our minds to a full consideration of the problems involved. As scientists dedicated to the betterment of mankind, we may find ourselves in conflict over many of the problems so clearly delineated in this book.

While this is not a book to read from cover to cover, the issues involved here are too important for our future to be

avoided or denied. We as psychiatrists are compelled to give serious thought to these issues. Whether we do formal research or not, we have voices that must be heard in many of the areas discussed in this volume. Every graduate school and training program should have a seminar on human experimentation, using this book as the basic text.

While Jay Katz and his collaborators do not give us the answers, they raise the questions and give us commentary and discussions as a foundation on which to begin our search. Each person must find his own answer, which can then withstand the challenge of self, profession, society, and others.

JONAS R. RAPPEPORT, M.D.
Baltimore, Md.

Comparative Psychotherapy: An Experimental Analysis, *by Adolph O. Di Loreto, Ph.D. Chicago, Aldine-Atherton, 1971, 309 pp., $9.95.*

This is a research project published in book form. Masses of data and statistical analyses are presented to support the contention that there is now available an adequate paradigm for research in psychotherapy; it includes measurable definitions of therapeutic techniques and their limits of applicability and quantitatively demonstrates therapeutic efficacy in delimited contexts. The research design requires simultaneous consideration of input, process, outcome, and follow-up variables. Unfortunately, the findings and conclusions of the author and his research staff may obfuscate rather than illuminate basic research questions relevant to psychotherapy's effectiveness. Nonetheless, there is a pioneering spirit that pervades the research effort and promises that this project will contribute to eventual research technology which will be able to delineate, identify, and quantify the necessary and sufficient conditions for effective psychotherapy.

This project seeks to compare the relative effectiveness of systematic desensitization group psychotherapy, rational-emotive group psychotherapy, and client-centered group psychotherapy in the reduction of interpersonal anxiety in separate groups of introverts and extroverts. It is comforting to me, however, to note that all three forms of therapy reduced anxiety more than did the therapies in either of the two control groups used. It is also of interest to note that in the two control groups, the placebo group in which there was contact between group members and research staff without attempted therapy showed more anxiety reduction than the placebo group where there was no contact at all with research staff. This suggests that outcome differences observed between the three treatment groups and the two control groups might be accounted for as resulting from a continuum of the degree of communicative transactional activity occurring between group therapists and group members, rather than as a function of the specific therapy used.

The obfuscation of the issues of therapy derives from the admitted fact that systematic desensitization was being compared as a form of therapy with client-centered and rational-emotive therapies in regard to anxiety reduction even though client-centered therapy and, to a lesser degree, rational-emotive therapy explicitly do not seek anxiety reduction as a primary goal, whereas systematic desensitization does focus explicitly on that target symptom. Anxiety per se is recognized in the approaches of client-centered and rational-emotive therapy as being to some degree desirable and necessary for growth, maturation, and risk taking.

Further obfuscation is derived from the study's implication that anxiety reduction should be a primary objective of all psychotherapy. It is well known that direct suggestion, hypnotherapy, and chemotherapy are probably more effective than either individual or group psychotherapy when the primary goal of the intervention is anxiety reduction. The usual goals of psychotherapy are more ambitious and include general symptom relief, improved social adjustment, maturation, and heightened autonomy and creativity. Of course, this should not be the basis for faulting this research project, which focuses entirely on the objective of anxiety reduction as the basis for comparing the three therapy models.

The book contains critiques by representatives of each school: Albert Ellis for rational-emotive psychotherapy, Alan Goldstein and Joseph Wolpe for systematic desensitization psychotherapy, and Angelo V. Boy for client-centered psychotherapy. They all make the point that although the study purported to compare these three therapies in "pure" form, this in fact was not done. The research design did not control the problem that the so-called schools of psychotherapy are hardly mutually exclusive in their theories, techniques, and models; there is considerable overlap among them.

The fact that one of the control groups had contact with research staff without therapy and still showed greater anxiety reduction than the no-contact group suggests that the study may primarily reflect the nonspecific effects of psychotherapy on anxiety. That is, independent of the specific model and techniques used in psychotherapy, the therapeutic situation and experience itself will decrease patients' anxiety.

This study does not address itself to the overriding question of complicating side effects of directive therapies such as systematic desensitization and rational-emotive psychotherapy: namely, that the therapeutic gains invoked by authoritarian, directive, structuring, manipulative, pedagogic, and avuncular therapists all exact a high price. Directive therapies foster and reinforce dependency, activate fusion fantasies, and deprive patients of the opportunity for achieving the more long-lasting growth and maturation that could occur in a therapeutic relationship that is egalitarian, nondirective, nonauthoritarian, and intimately communicative. However, despite its shortcomings, I recommend this book highly for the serious student of research methodology in psychotherapy.

LOUIS B. FIERMAN, M.D.
Portland, Conn.

Modern Perspectives in World Psychiatry, *edited by John G. Howells, M.D., D.P.M. New York, Brunner/Mazel, 1971, 728 pp., $25.*

The complexities of a holistic approach to the integrated understanding of human behavior are amply demonstrated by the disciplines and subdisciplines of the life sciences represented in this volume. The title of the book well defines the scope of its contents, for the editor has selected authoritative presentations on a wide range of basic and applied fields of study by authors who are internationally eminent in their chosen specialties.

The book is divided into two sections. The first deals with scientific knowledge and the second with clinical concepts and practices representing the major psychiatric approaches. Each author has selected the most significant material in his own field, so that each chapter is an extensive review of current knowledge in that area and gives the reader an up-to-date overview of contributions pertinent to the field of psychiatry.

That the advances in modern psychiatry have come through developments in many other fields is reflected in the diversity of subjects covered in the volume. In the first section these range from the biochemistry of mental illness to the phenomena of hypnosis, from cytology of the nervous system to body image

and corporal awareness, and from the neurophysiological basis of thought to the significance of nuclear sexing.

Some of the chapters report on basic research in a number of highly specialized fields. They are, however, presented in language sufficiently nontechnical that most of the material is communicated to the nonspecialized reader in a clear and understandable manner. However, more than a superficial interest in and acquaintance with the subject matter is sometimes necessary.

The editor has been most successful in bringing together such disparate spheres of scientific inquiry and placing them in order so that there is a sense of relatedness.

The second section is a valuable anthology of the major modern psychiatric systems and their application in many countries—Morita therapy in Japan, existential analysis in Switzerland, Pavlovian theory in Russia, psychoanalysis in the United States, family therapy in Great Britain, and so forth.

With authors drawn from many countries, the volume indeed places in perspective the particular approaches prevalent in different nations. For American psychiatry, with its emphasis on psychodynamic formulations, the importance of the contributions of physiological knowledge and concepts to the behavioral sciences provides an enlightening balance.

While there has necessarily been some selectiveness, each account deals with recent formulations and emphases in its subject matter. Appropriately, the first chapter in the second section deals with the contributions of clinical psychology to psychiatry. It is written by an eminent British psychologist whose scientific skepticism about psychiatric systems in general and about analytic psychotherapy in particular is well known to clinical psychologists in the United States.

Equally appropriately, the penultimate chapter deals with transcultural psychiatry—a new and emerging field of study that has the potential for many contributions to fundamental knowledge about human behavior.

This volume is not intended to be a textbook in the usual sense of the word. It collates knowledge from many scientific fields significant to the development of modern psychiatry and, together with the extensive bibliographies that accompany each chapter, will serve as a useful reference for further study. For any psychiatrist who wishes to be well informed regarding modern-day formulations of psychiatric concepts, this volume will be an important source in broadening and deepening his appreciation of recent thinking in the field. The psychiatric resident should find this work a first-class educational instrument in obtaining basic information about the current psychiatric concepts that prevail in different parts of the world, and it should broaden his professional horizons at an early stage in his professional development.

The implicit message of the volume is that human behavior is now viewed in the context of many valid frames of reference and that differences in advocacy arise from the emphases, biases, and philosophies of the proponents of specific systems. This conclusion comes through because of the objective way in which each author offers his contribution.

JOHN DONNELLY, M.D.
Hartford, Conn.

Crises of Family Disorganization: Programs to Soften Their Impact on Children, *edited by Eleanor Pavenstedt, M.D., and Viola W. Bernard, M.D. New York, Behavioral Publications, 1971, 103 pp., $5.95.*

This excellent and most interesting book is a compilation of eight papers presented at the New York State fifth biennial divisional meeting of the American Psychiatric Association in 1967. The focus of the book is on the lack of integration between the hospital staff caring for the psychotic parent and the community agencies, which most of the time are not alerted to the plight of the patients' families or to the problems of the discharged patient.

The editors welcome earlier hospital discharge for psychotic patients and the reduction of the social breakdown syndrome that often results from prolonged custodial hospitalizations. However, they are also very aware of the harmful psychological interactions that result when parents and their children are reunited at home without proper hospital planning for the discharged psychotic parent and the readying of the home situation with community support. They stress the lack of a treatment plan, both for the discharged psychotic parent who frequently returns home without community resources to make his job easier and for the children returning to the home without proper community help for easing them back into a most difficult situation. The editors identify the types of crises that should be of concern to psychiatrists as far as children are concerned, and they strongly urge community help—specifically, homemaking services, infant-child centers, later-age child-care centers, and especially continuing psychiatric supervision of the discharged patient.

The editors strongly urge psychiatrists to develop "binocular vision, so that they might see, instead of separate images of the sick parent and the young child, those two images fused into a view of their interactions in the total family context."

In her paper "Meanings of Motherhood in a Deprived Environment" Eleanor Pavenstedt discusses the health center and family health groups that serve families living in the Columbia Point Housing Project in Boston. The groups consist of a pediatrician, an internist, a social worker, two public health nurses, and a nonprofessional family health aide. Much emphasis is put on training mature women from poverty areas in healthy child rearing, child care, and elements of nursing and child psychology so they can then go into the neighborhood and make the bridge between the health center and the families living in the area. Dr. Pavenstedt questions any reliance on placement away from the home as a treatment measure for children, since in so many cases the mothers who are ill are from an orphanage or foster home placement themselves. She feels these mothers are "extremely fragile, having little energy to cope with their family, and being chronically depressed, or both."

In the last paper, "Parental Incapacity and the Welfare of Children," Roberta Hunt cites the chronically overcrowded conditions of the shelters the community maintains to receive children caught in a child-care crisis situation. There is the chronic inability of social service agencies, both government and voluntary, to meet the needs of families where there is a breakdown in parental capacity. The major thrust of the study is to prevent foster care placement, which unfortunately is done too often on a crisis basis and much too late—often after the family deterioration is advanced and serious, and after possibly irreversible damage to the child has already occurred.

A plea for responsible casework planning before the child is removed from the home and the establishment of comprehensive services to assist the child in the family led to some rewarding changes in the New York City setup. A nighttime and weekend emergency child welfare service telephone, with "night watchers" or child sitters to stay with the children during that crisis period when the parent is removed from the home, has at least cushioned the trauma of the child. Homemakers went to the family immediately so that the child could remain at home in familiar surroundings, near his school and friends,

and then, it was hoped, receive long-term supportive services in the community.

This book emphasizes that there is *no* such thing as an isolated psychiatric illness; the reflection of such illness is seen within the entire family. It is urgent that agencies, hospitals, and all the professionals and paraprofessionals involved be aware of the entire social situation and problems inherent therein.

BENJAMIN H. BALSER, M.D.
New York, N.Y.

The Drinking Man, *by David C. McClelland, William N. Davis, Rudolf Kalin, and Eric Wanner. New York, Free Press (Macmillan Co.), 1972, 386 pp., $10.*

This technically exhaustive book reports the results of a ten-year, NIMH-supported study of why men drink. The authors explore the deeper motivations for drinking below the surface explanations of "to quench a thirst," "to be social," or "to celebrate an event." They examine the physical, mental, and emotional states that influence how much and how often a man drinks. They found, for example, that a group of men drank more when a female singer was part of a party than when there was no woman present. The setting for alcohol-induced fantasies of power and sexual prowess encouraged heavier drinking.

The authors' conclusions—arrived at empirically and supported by observations relating male drinking to the effect of alcohol on fantasy, folk-tale themes, cross-cultural influences, and the individual needs of heavy, habitual drinkers—suggest that men drink because alcohol gives them a feeling of power. Their studies led them to reject the currently popular "dependency" theory of alcoholism in favor of a "power" theory of men's drinking patterns.

Another effect of alcohol on the men studied was a tendency to "space out time concern," resulting in their ignoring the need to get back to work or to get home and thus prolonging the drinking. In college men, the feeling of power and sexually aggressive fantasy was exemplified by the "stud" syndrome produced by alcohol. The authors observed that many heavy drinkers were characterized by strong concerns for personal power, aggression, prestigious possessions, and dominance. They suggest that therapy might be directed toward substituting real power for alcoholic fantasy. Such satisfactions as helping people, holding office in worthwhile organizations, sports, or succeeding in one's chosen work can replace alcoholic pseudo-power illusions.

In certain societies the collective fantasy of folk tales endorses heavy drinking. In some societies, where the masculine image is diminished, such as with the Irish and disinherited Indians, and with men in small Mexican villages and black men, where outlets for socialized power channels are often blocked, men are prone to heavy compensatory drinking in order to attain the temporary illusion of power. Arabs, on the other hand, have a high demand and support for the masculine role and thus have little need for drinking. Some men, as they age and lose power, turn to alcohol to at least retain a feeling of power.

The authors suggest that men do not drink primarily to reduce anxiety, since men in cultures with a high tradition of anxiety drink less, not more. They also see little evidence of increased dependency concerns in heavy drinkers, who often express counter-dependency aggressive behavior.

The authors realize that many of their concepts are innovative and radical and not entirely supported by scientifically sound evidence. Their ideas regarding male drinking, however, obviously contain much truth when one stops to think about it, and this book represents a milestone along the path to a better understanding of alcoholism. One cannot help but wonder, however, why women drink. Although this book does not touch on the subject of female alcoholics, perhaps they also drink to attain a feeling of power.

FREDERICK LEMERE, M.D.
Seattle, Wash.

The Psychoanalytic Process: A Case Illustration, *by Paul A. Dewald. New York, Basic Books, 1972, 655 pp., $15.*

This is a somewhat unusual book in that the author, a training psychoanalyst, reports in some detail a more or less verbatim outline of his analysis of a young married woman. The psychoanalytic hours are reported in terms of the patient's statements as well as the analyst's responses. This is followed in each chapter by a discussion of what had transpired during the hour and why the analyst and the patient reacted as they did.

The patient would appear to have had a mixed psychoneurosis, as the author describes. She had problems with eating, phobias, and depression, and sexual difficulties. She obviously was an intelligent young woman who had realized that her previous, more brief therapy was insufficient and that she needed more intensive treatment. She faced that problem of whether or not to undertake psychoanalysis and, if so, how to pay for it. Nevertheless, as the author points out, she made her decision and went ahead with analysis, which turned out to be reasonably successful.

Once treatment began, the patient demonstrated many of the qualities often seen in analytic patients and even in those in other types of dynamic therapy. She feared losing control of herself. She resented the analyst's neutral stance, and for quite some time she remained convinced that he would react as others had done in the past. She did develop a transference neurosis, which she was able to understand and work through.

This young woman had been raised in a family in which there was parental strife, with the father having affairs. The patient herself had had a sexual experience with an uncle at an early age. These and other factors led to some of her oral and oedipal problems. Even though she had difficulties from all levels of psychosexual development she would probably be considered primarily a hysteric, and one with reasonable ego growth. She made good use of the analysis, and the author is careful to point out that, as such, she responded better than many patients do to this type of treatment.

All in all, this is a unique book in that it does report in some detail the contents of a particular psychoanalysis. It has the added value of having the author's contributions regarding his own reactions, whether they be realistic or countertransference in nature. Perhaps one drawback is the difficulty in putting into written words those things which were verbalized spontaneously. For example, the author frequently uses the word "detail," and in print this obviously sounds more formal and less relaxed than it must have during the analysis. He also has a specific way of ending each hour, which at times sounds rather abrupt and unfeeling, although one cannot tell from merely reading the book.

I recommend this book to any serious student of psychoanalysis and of psychoanalytic concepts. It answers at least in part one of the frequent criticisms of analysis, namely, that no one except the analyst and the patient really know what is transpiring. Its primary problem is that it describes a reasonably

"good" patient and therefore does not contain as many of the difficulties usually encountered in analysis as it might. The author is quick to admit this. Nevertheless, the book is to be recommended for anyone interested in how a psychoanalysis may go and in some of the factors involved in how the analyst handles his patient.

STUART M. FINCH, M.D.
Ann Arbor, Mich.

Principles of Child Psychotherapy, *by Donald J. Carek, M.D. Springfield, Ill., Charles C Thomas, 1972, 218 pp., $10.75.*

Thirty-one years ago F.H. Allen commented on "the somewhat sparse literature on psychotherapy with children" when he wrote a book on this subject (1). Carek now finds:

> The literature on child therapy is lopsided. First, therapy of children is overshadowed by literature on child psychoanalysis. Second, the existent literature leans toward establishing more securely a premium on intensive therapy which is akin to child analysis. There is a need for delineation of a broader view of child therapy and all it entails.

He also points out:

> Though it is understandable that child therapy is and will be compared to adult therapy, to build a conceptual model on such comparisons does have drawbacks.... Unfettered of limitations inherent in adult-child therapy comparisons, hopefully child therapists might become less obsessed with worrying about parameters to be used in child therapy. Hopefully they then might get more to the business of considering child therapy in its own light. Looked at in another way—in a developmental fashion—the child therapists need to let the identifications with adult therapy give way to establishment of an identity in child psychotherapeutic work.

With these points as a broad base, Carek proceeds to develop a credible report of operational, eclectic approaches to the developmental and situational problems of childhood. He points out that "the bulk of child therapy is crisis intervention in the true sense of the word." Like E. Singer (2), he believes that "it would seem more reasonable to put the emphasis in therapy on awareness rather than on insight, 'the awareness of inner situations (and outer situations) which have been dissociated in an attempt to deny them.' To some, such awareness may approximate or even be synonymous with insight." He goes on to say, "One would reasonably say that those involved in helping a child develop adequately will need to think in terms of helping a child remain or become accessible to his internal forces and to those environmental forces that ordinarily enhance his personality development."

Characteristic of this book is the plea for moderation in implementing dichotomous concepts where neither extreme is completely tenable in all cases. For example, in considering the recurrent nature-nurture controversies, the author proposes: "Hopefully the therapist remains mindful of the complex interactions involved at a multitude of levels so that he does not feel compelled to take sides in fruitless controversy bred of simplistic reductions." Carek is particularly adept at the wry questioning of some erudite interpretive trends, when situational factors are obviously more contributory to the content of a child's productions than are unconscious conflicts.

Especially interesting is the author's awareness of growth potential as a significant factor in effective therapy with children. He agrees with others who feel that one "should resist the tendency to become the proud parent who may then unconsciously wish to hold the child through subsequent development." As he points out in a boy's case he reviews briefly, a particular age-specific conflict "was not one to be resolved in therapy but a conflict with which he needed to tussle and work out over an extended period of time during the long span of adolescence within the multitude of his everyday interactions." Carek recognizes that "maturational pull" enhances the effectiveness of therapy with children, and he defines this factor as "an inner directive force, derived both from innate, constitutional factors and from internalized environmental expectations." In these frames of reference he can reasonably state: "In effect, psychotherapy is to help remove the roadblocks—if they are conflicts, to help resolve them—that interfere with the child's dealing or coping with his developmental task."

Many will disagree with some of Carek's theses. Nevertheless, this is a book that needed to be written, and it deserves careful reading by anyone concerned with the developmental problems of children.

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1. Allen FH: Psychotherapy with Children. New York, WW Norton & Co, 1942
2. Singer E: Key Concepts in Psychotherapy. New York, Random House, 1965

CALVIN S. DRAYER, M.D.
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Two Gentlemen To See You, Sir: The Autobiography of a Villain, *by Victor Carasov. New York, Taplinger Publishing Co., 1971, 191 pp., $5.50.*

This book is a story of man's inhumanity to man, a story of the cursed life of a man who seemed to have known himself, but who, because of utter deprivation, rejection, and an almost uncontrollable need for seeking misery, has lived far more of his life within prison walls than outside. His name—Victor Carasov—may be unimportant, but his description of his mutilated life is a significant document in the annals of crime.

The author was born in England. The divorce of his parents, an unhappy combination of a Russian father and an Irish mother, resulted in the complete rejection and neglect of their son. He himself, though, may have had some of the seeds of self-destructiveness within him to cause him to turn his life into one of persistent crime. From an early age he learned to steal, burglarize, and cheat. While he claims that he tried to earn an honest living every time he was released from prison, all his efforts came to naught.

Carasov did not find redemption in a world that had completely rejected him. Yet he has insight enough when he says:

> Above all, I must put it on record, *most of my experience was brought upon myself, by myself....* I spent nearly two years of the four-year term, disturbed my mind and my nervous system for years and years. Also, the *anger*... the *rage*... the *resentment* engendered *there* was the *motivating force of many of my subsequent crimes.* In other words, I later *hurt people* in the free world as a kind of *transference of all that violence I felt* towards the Broadmoor personnel... at least, that part of it with which I was all too familiar (p. 59).

Shortly thereafter he was accused in Broadmoor Prison of threatening the prison staff, and after due warning, he was attacked by a fellow inmate. Carasov, however, was able to control himself, for which he was commended, and because of his good behavior, he was transferred to another ward. However, there he got into a fight with a man who had made advances toward him. He was then put in canvas and in solitary confinement, with the admonition that "if he continues to attack others he will be put in canvas for the rest of his time."

Following these experiences, Carasov got the idea of writing the story of his life. He talked with a Mr. Gollancz (a publisher, recently deceased, who was known for his interest in social and criminal problems), who gave him pen and paper for writing his story. However, it took some time because Carasov did not really give up his criminal way of life but continued as a habitual thief in and out of prison.

On the outside he did not live a chaste life. There was sex; as he describes it: "Not only did I have to make love to the mistress, but to the maid also, which was not entirely to my taste. It smacked too much of cheap, cheap orgy .... Funnily enough, though I am a bit of a tramp, a bit of a bastard in some ways, there are some things I *won't do* and this *maid* and *mistress* thing I *did not like*" (p. 96).

As the book ends, Carasov has been incarcerated at the "new look" prison, Blundeston, for four years, waiting for parole. Now, all in all, he has spent 50 of his 65 years in a succession of prisons, unrehabilitated.

Two Gentlemen To See You, Sir is written with some humor, some self-understanding. Even if at times Carasov's description of his escapades becomes boisterous, repetitious, even boring, he has succeeded in bringing forth a frightening, yet accurate picture of English prison life—which is not unlike life in our own prisons. His book is one more page in the myth of misunderstood rehabilitation. Yet one is compelled to wonder whether benign treatment—provided our prisons could furnish it—would be more effective in rehabilitating prisoners. Prisons brutalize the correctional officers and the inmates. To my mind, only 15 to 20 percent of the people incarcerated ought to be kept within prison walls because of their danger to society and to themselves. The rest ought to be treated in rehabilitation centers, if such institutions could be established.

Although we may not think that humanization of our prisons would reduce crime, our belief in human individual dignity must be the guiding light for the handling of criminals.

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Progress in Neurology and Psychiatry: An Annual Review, vol. XXVI, *edited by E.A. Spiegel, M.D. New York, Grune & Stratton, 1971, 559 pp., $29.95*

This twenty-sixth edition of Dr. Spiegel's well-recognized annual book makes a noble attempt to reach its objective: a survey of progress in the closely related fields of neurology and psychiatry. As noted in the preface, the increasing output of the world literature necessitates a periodic selection of some subjects for review. Particularly fortunate selections for the current edition are the clinical subjects of ophthalmoneurology, neuroendocrinology, and group psychotherapy.

As usual, the book is divided into the four sections of basic sciences, neurology, neurosurgery, and psychiatry.

In the first section, neuroanatomy, biochemical aspects of neurophysiology, regional neurophysiology, neuropathology, and neuropharmacology are covered with voluminous references to the literature. These chapters provide the clinician with a valuable survey of new developments in these basic sciences.

In the second section, clinical neurology, otoneurology, neuro-ophthalmology, epilepsy, neuroendocrinology, the autonomic nervous system, cerebrospinal fluid, and neuroradiology are covered in an admirable fashion. The survey of these subjects includes comprehensive references to the literature.

In the next section, which deals with neurosurgery, attention is given to the peripheral nervous system, central nervous system, trauma, and brain tumors. These chapters are somewhat limited in their survey, but references to the literature are adequate.

The section on psychiatry is divided into the subjects of clinical psychiatry, criminal psychopathology, child psychiatry, family therapy, alcoholism, psychosomatic medicine, psychoanalysis, group psychotherapy, drug therapy, and occupational therapy. In all of these subjects sources for information are obtained from the many references to the literature. The chapters on clinical psychiatry, family therapy, and drug therapy are especially commendable.

The contributors to this comprehensive volume of 28 chapters consist of a representative group of specialists in the basic science and clinical aspects of neurology and psychiatry. The book primarily deserves recommendation for its reference to approximately 5,000 papers that have been reviewed by the contributors. An index completes the volume.

NATHAN S. SCHLEZINGER, M.D.
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Psychiatric Disorder and the Urban Environment, *edited by Berton H. Kaplan, with Alexander H. Leighton, Jane M. Murphy, and Nicholas Freydberg. New York, Behavioral Publications, 1971, 310 pp., $12.95.*

This book summarizes the proceedings of a seminar series on psychiatric disorder and the urban environment held at Cornell University under the guidance of Alexander H. Leighton. The participants included Lloyd Brightman, Isidor Chein, Catherine Fales, Harold Feldman, John R. P. French, Jr., Nicholas Freydberg, Herbert Gans, John Gulick, Paul V. Gumpl, John S. Harding, Lawrence E. Hinckle, Jr., Laurel Hodgden, Raymond Illsley, Mirra Komarovsky, Thomas Langner, Dr. Leighton himself, Stanley T. Michael, Jane M. Murphy, and William F. Whyte. This distinguished cast was charged with the task of considering various alternatives for studying the urban environment's influence on mental health and mental illness.

Kaplan provides the following rationale for the publication of this book:

> a. To preserve the exchange of ideas that appeared most relevant to the future development of the field of social psychiatry; b. to stimulate the clarification of ideas on social processes and mental illness; c. to preserve some worthwhile ideas and information that otherwise would be fugitive; and d. to preserve selected commentaries that illustrate how experienced investigators have asked various questions on studying the impact of social process on mental health.

To achieve these goals Kaplan has retained some extended excerpts from the actual seminar conversations, but he has also provided orienting papers and brief summary statements of much longer seminar discussions.

The book is organized around Alexander Leighton's theory

of the relationship of mental illness to social disintegration. While the book is devoted primarily to questions of procedure, research design, and methodology, it also contains material of more conceptual and theoretical interest.

Despite Kaplan's thoughtful and skillful editing, the volume suffers from the problems that seem to be inevitably inherent in such seminar proceedings: The participants were uneven in their preparation, and few presented their ideas with either the cogency or precision that characterizes their more formal publications. To be sure, there is something to be said for preserving the give-and-take, preliminary quality of seminar exchanges, but in this case these exchanges are not particularly exciting. There are glimpses of confusion, acrimony, humor, and the sense of discovery, but too few to preserve the excitement of a seminar.

What remains is a portrait of competent scientists saying interesting things that are relevant to the underlying theme but not presenting formal methodological innovations, new data, or new conceptual positions. Part of the problem may lie in the fact that Leighton's disintegration thesis has been well known for more than a decade, and much of the material in this book recapitulates what has long been common knowledge for any professional interested in this area. It could not have been easy for the participants to be creative about an idea that has been with us since Durkheim.

Although these faults make much of the book unrewarding reading, one should not conclude that the book is without redeeming qualities. It does accomplish, to some degree, each of the four objectives Kaplan set for himself. The serious student of social psychiatry will find intriguing and informative passages that will repay him for reading carefully what he might at first glance be tempted to set aside. Furthermore, the Leighton thesis that mental illness is a product of social disintegration is of such fundamental importance for our assumptions about the nature of man, society, and the etiology of mental illness that any inquiry into its viability must be valuable.

I wish that the seminar participants had challenged the basic assumptions of this thesis with empirical data (for I believe that there are both epistemological and empirical grounds for urging its modification), but I appreciate their effort to deal with methodological issues that relate to it, just as I commend the editor for his serious efforts to create a book out of much less than a book. He does not fully succeed, but he nevertheless brings together enough valuable material that the volume will be of interest to social scientists and psychiatrists who wish to think further about social disintegration and mental illness.

ROBERT B. EDGERTON, PH.D.
Los Angeles, Calif.

Perspectives on Violence, *edited by Gene Usdin, M.D. New York, Brunner/Mazel, 1972, 161 pp., $7.50.*

Perspectives on Violence consists primarily of papers on violence, written by a historian, a social psychologist, an anthropologist, and a psychiatrist, that were presented at the 1971 annual meeting of the American College of Psychiatrists.

Dr. Usdin's excellent preface and Dr. Henry Brosin's introduction anticipate the contributors' conflicting views of the origins of man's violence and its solution.

Professor H. Stuart Hughes gives a historian's critique of violence. Taking a long view of revolutions, he questions the extent to which they have marked a change for the better in human events. The expected alterations are not always forthcoming, and "their accomplishments may seem incommensurate with the sufferings they have entailed." He suggests that revolutions may be significant not so much for what they actually do as for the legend that gathers around them. According to Hughes, students consider revolutions and civil wars to be justified, while their professors, on the contrary, find the rare examples of the moral application of violence in wars of national self-defense (like the Allied effort in World War II). The students see "acts of violence they approve as effecting some beneficent change. The professors justify the violence they approve as preventing a greater evil."

Besides the ordinary legal processes, Hughes sees only two alternatives to force: disciplined, mass nonviolence and individual secession. The first has been successful in some instances (e.g., in India) because of an awareness that the established powers lacked the determination to apply counterforce with utter ruthlessness. (Where established power has not hesitated and there has been no hesitation in suppressing dissent at all costs, mass violence has seldom been attempted.) The second alternative suffers from severe limitations and does almost nothing to affect the course of events.

Dr. Nevitt Sanford discusses the sources and remedies of collective destructiveness. He attributes group murder, enslavement, torture, and reduction of dignity to a belief that what is done is right or necessary and that the victims are less than human or beyond the pale. He refers to such social destructiveness as sanctioned or legitimatized evil. Ordinary people who may even be opposed to group destructiveness surrender their individual consciences in favor of the organization's morality and contribute merely by "doing their jobs." Sanford believes that aggression, including its violent manifestations, is provoked by frustration. It is not inborn but is generated out of experience and learning—primarily in childhood. It involves a projection of one's own badness onto others. Destructiveness may also be carried out by people who are merely responding to the guidance or commands of superiors. Promoting universalism in the human community and wholeness in the individual personality are suggested as ways of preventing collective destructiveness.

In his presentation of anthropological perspectives on violence, Dr. Wilton S. Dillon emphasizes the interplay among obligations, hostility, and dependence as precursors to violence and the role of gifts in peace keeping, as observed in studies of various South American and Pacific Island cultures. He looks to the production of a diagnostic tool or a social indicator of potential violence as one way of controlling violence. It would "detect the stresses and strains between individuals or groups when donors and recipients" fail to reverse their roles and fail to find exchange commodities to which both attach value.

He warns:

> The best-intentioned public servants, editors of the mass media, and legislators seem innocent about the hazards of charity, pity and guilt. Unless accompanied by an attitude that the recipient has something to offer, that he dislikes being on a permanent dole, the "donors"... court new opportunities for social conflict when they act benevolently and then expect, in return, gratitude and docility.

He urges a search for operational meanings to the following three prescriptions: Leadership consists of discovering the means by which individuals (or nations) feel indebted and can offer their gifts toward a common good; the importance of functional reciprocity in human organization; and the importance of play, humor, and ceremony in human interaction.

The psychiatric approach is presented by Dr. Charles A. Pinderhughes. He focuses on the roles of projective identification

and paranoia in violent interactions and the underlying mechanism in which the enemy represents a renounced and projected part of the self, which in the moment of violence is perceived as totally evil. He believes that as long as we engage in introjective identification, which is the basis of group formation, and employ projective identification with others, we will have uncontrolled group-related paranoia and violence in human intergroup behavior.

The book concludes with excellent discussions by Drs. Howard P. Rome and Louis J. West.

The various approaches to the subject of violence contained in this book clearly illustrate the complexity of the problem, and it is in this that a major strength of the book lies. It is thought provoking and a good beginning for those who are interested in understanding this important problem that somehow keeps coming closer to all of our lives.

NORMAN Q. BRILL, M.D.
Los Angeles, Calif.

Mental Illness in Childhood: A Study of Residential Treatment, *by V.L. Kahan. Philadelphia, J.B. Lippincott Co., 1971, 207 pp., $10.*

Mental Illness in Childhood details an excellent research and treatment program carried out in the early 1960s at West Stowell House, an English residence for severely disturbed children. The book is especially significant since it describes in a reproducible manner a program that was well integrated into a total system of services and carried through within tight budget limitations. A humane ideal of "child centered intensive care" underlies policy in this project. Dr. Kahan believes that good relationships are necessary for therapy of any type, that most disturbed children have basic problems with relationships, and that they function within a continuum of personality strengths varying from normal to maladjusted to psychotic.

About 30 children at a time were treated at this unit in "family groups" of ten, with a round-the-clock staff-to-patient ratio of no less than two to eight. Living quarters were homelike, regressive behavior was permitted, and nurturant staff responses were encouraged. Play, special education, and psychotherapy were individualized. Drug therapy was minimal. Parents were offered help rather than directions or blame. The book is valuable alone as a manual for practical residential treatment.

Careful study was made of all 71 children seen during the six-year program; diagnostic evaluations were performed, background material was gathered, and a symptom checklist was kept. Most findings appear in tables under four categories of patients: psychotic, psychotic and severely retarded, disturbed in reaction to subnormality, and conduct-disordered. However, numbers were too small for statistical validity, and there was no normal control group. Dr. Kahan's discussions of results, however, are a lesson in clinical observation. Motor abnormalities, speech, sensory experiences, destructiveness, and mannerisms are each considered in detail, and then some conclusions are cautiously made. Mannerisms in psychotic children, for example, appeared to be a valid diagnostic sign, while hyperactivity was nonspecific. Most psychotic patients showed evidence of brain damage. Family interactions were thought to play an important role in severe pathology, most often as an irritant to the patient's congenital vulnerabilities.

Follow-up of patients for social rehabilitation indicated results comparable to those of other good centers. Fifty-seven percent of the psychotic children and 78 percent of those with behavior disorders, for example, showed "much improvement." Overdependence, passivity, and indifference to adults reduced favorable prognosis. Retarded children did more poorly in this setting. Sixteen detailed case histories in the second half of the book give the reader a feeling for clinical process.

This book needs to be taken seriously. Residential treatment, after all, is a court of last resort for any system of family or child psychiatry. *Mental Illness in Childhood* is recommended as a reference for teaching about childhood psychosis and for those engaged in planning treatment units.

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This Month's Reviewers

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Books Received

This listing acknowledges the receipt of recent books. Books of particular interest to the readers of this journal will be reviewed as space permits, and copies of the reviews will be sent to the publishers. Books cannot be returned to the publishers.

Basic Neurochemistry, *edited by R. Wayne Albers, Ph.D., George J. Siegel, M.D., Robert Katzman, M.D., and Bernard W. Agranoff, M.D. Boston, Little, Brown and Co., 1972, 670 pp., $12.50 (paper).*

Focal Psychotherapy: An Example of Applied Psychoanalysis, *by Michael Balint, Paul H. Ornstein, and Enid Balint. Philadelphia, J.B. Lippincott Co., 1972, 161 pp., $10.*

Legacy of Love: The Right to Mental Health, *by William Bauer, M.D. New York, Vantage Press, 1972, 314 pp., $7.95.*

Justifying Violence: Attitudes of American Men, *by Monica D. Blumenthal, Robert L. Kahn, Frank M. Andrews, and Kendra B. Head. Ann Arbor, Mich., Institute for Social Research, University of Michigan, 1972, 358 pp., $5 (paper).*

Annual Review of the Schizophrenic Syndrome, vol. 2: 1972, *edited by Robert Cancro, M.D. New York, Brunner/Mazel, 1972, 502 pp., $17.50.*

Humanistic Psychology and the Research Tradition: Their Several Virtues, *by Irvin L. Child, Ph.D. New York, John Wiley & Sons, 1973, 207 pp., $8.95.*

Crisis Center Hotline, *edited by Ursula Delworth, Ph.D., Edward H. Rudow, Ph.D., and Janet Taub. Springfield, Ill., Charles C Thomas, 1972, 140 pp., $9.75.*

Child Abuse in New Zealand, *by David M. Fergusson, Joan Fleming, and David P. O'Neill. New Zealand Department of Social Welfare. Wellington, New Zealand, Government Printer, 1972, 342 pp., $4.50 (paper).*

Follow-Up Study of Hospitalized Adolescents, *by Benjamin Garber, M.D. New York, Brunner/Mazel, 1972, 189 pp., $8.50.*

Dr. Gardner's Stories about the Real World, *by Richard A. Gardner, M.D. Englewood Cliffs, N.J., Prentice-Hall, 1972, 127 pp., $4.95.*

Attachment and Dependency, *edited by Jacob L. Gewirtz, Ph.D. New York, Halsted Press, John Wiley & Sons (distributor), 1972, 225 pp., $10.95.*

Identification of Predelinquents: Validation Studies and Some Suggested Uses of Glueck Table, *edited by Sheldon and Eleanor Glueck. New York, Intercontinental Medical Book Corp., 1972, 147 pp., $7.75.*

Nine Rotten Lousy Kids, *by Herbert Grossman. New York, Holt, Rinehart and Winston, 1972, 407 pp., no price listed (paper).*

Childhood Psychopathology: An Anthology of Basic Readings, *edited by Saul I. Harrison, M.D., and John F. McDermott, M.D. New York, International Universities Press, 1972, 882 pp., $20.*

The Myth of Analysis: Three Essays in Archetypal Psychology, *by James Hillman. Evanston, Ill., Northwestern University Press, 1972, 298 pp., $9.50.*

Mental Health Services for the Mentally Retarded, *edited by Elias Katz, Ph.D. Springfield, Ill., Charles C Thomas, 1972, 264 pp., $12.75.*

Drug Abuse: Current Concepts and Research, *by Wolfram Keup, M.D. Springfield, Ill., Charles C Thomas, 1972, 458 pp., $19.50.*

In Youth, *edited by Richard Kostelanetz. New York, Ballantine Books, 1972, 327 pp., $1.95 (paper).*

The Neuroses: A Psychoanalytic Survey, *by P.C. Kuiper, M.D., Ph.D. New York, International Universities Press, 1972, 251 pp., $9.*

Household and Family in Past Time, *edited by Peter Laslett with Richard Wall. New York, Cambridge University Press, 1972, 609 pp., $37.50.*

State Association for Retarded Children and New York State Government, 1948–1968, *by Herbert J. Lerner. New York, New York State Association for Retarded Children, 1972, 374 pp., no price listed (paper).*

The Fallacy of Understanding: An Inquiry into the Changing Structure of Psychoanalysis, *by Edgar A. Levenson, M.D. New York, Basic Books, 1972, 223 pp., $7.95.*

Psychiatry and Ethics, *by Maurice Levine, M.D. New York, George Braziller, 1972, 377 pp., $12.50.*

Pets and Human Development, *by Boris M. Levinson, Ph.D. Springfield, Ill., Charles C Thomas, 1972, 222 pp., $10.50.*

Advances in Psychosomatic Medicine, vol. 8: Psychosocial Aspects of Physical Illness, *edited by Z.J. Lipowski. New York, S. Karger, 1972, 275 pp., $18, individuals; $33.05, others.*

Family Talk, *by Jerome Liss, M.D. New York, Ballantine Books, 1972, 236 pp., $1.50 (paper).*

Handbook of Psychiatric Therapies, *edited by Jules H. Masserman, M.D. New York, Science House, 1972, 623 pp., no price listed.*

Science and Psychoanalysis, vol. XXI: Research and Relevance, *edited by Jules H. Masserman, M.D. New York, Grune & Stratton, 1972, 271 pp., $15.75.*

Wechsler's Measurement and Appraisal of Adult Intelligence, 5th ed., *by Joseph D. Matarazzo, Ph.D. Baltimore, Williams & Wilkins Co., 1972, 547 pp., $15.75.*

Suicidal Behaviour, *by J. Wallace McCulloch and Alistair E. Philip. Elmsford, N.Y., Pergamon Press, 1972, 118 pp., $7.75.*

Handicap: A Study of Physically Handicapped Children and their Families, *by Joan K. McMichael, M.B., Ch.B. Pittsburgh, University of Pittsburgh Press, 1972, 205 pp., $6.95.*

Dyslexia and the Individual, *by Patrick Meredith, M.Sc., M.Ed., Ph.D. London, Hamish Hamilton, 1972, 184 pp., £2.35.*

A Milieu Therapy Program for Behaviorally Disturbed Children, *by Marjorie McQueen Monkman. Springfield, Ill., Charles C Thomas, 1972, 281 pp., $14.50.*

The Genetic, Metabolic and Developmental Aspects of Mental Retardation, *edited by Robert F. Murray, Jr., M.D., and Pearl Lockhart Rosser, M.D. Springfield, Ill., Charles C Thomas, 1972, 333 pp., $16.75.*

Counseling Parents of the Emotionally Disturbed Child, *edited by Robert L. Noland. Springfield, Ill., Charles C Thomas, 1972, 417 pp., $11.50.*

Sigmund Freud and Lou Andreas-Salomé: Letters, *edited by Ernst Pfeiffer, translated by William and Elaine Robson-Scott. New York, Harcourt Brace Jovanovich, 1972, 242 pp., $7.95.*

Experimental Models of Epilepsy—A Manual for the Laboratory Worker, *edited by Dominick P. Purpura, M.D., J. Kiffin Penry, M.D., Donald B. Tower, M.D., Dixon M. Woodbury, Ph.D., and Richard D. Walter, M.D. New York, Raven Press, 1972, 606 pp., $21.50.*

Advances in Psychosomatic Medicine, vol. 7: Hunger and Satiety in Health and Disease, *edited by F. Reichsman. New York, S. Karger, 1972, 336 pp., $18, individuals; $37.80, others.*

The Influence of Alcohol and Meprobamate on Psychological Processes in Man, *by Niels Reisby. Copenhagen, Munksgaard, 1972, 338 pp., 105,00 Dan. Kr. (paper).*

Treatment of the Sex Offender, *edited by H.L.P. Resnik, M.D., and Marvin E. Wolfgang, Ph.D. International Psychiatry Clinics, vol. 8, no. 4. Boston, Little, Brown and Co., 1972, 242 pp., $21.50, annual subscription rate.*

Examination of the Personality, *by Nancy A. Roeske, M.D. Philadelphia, Lea & Febiger, 1972, 156 pp., $5 (paper).*

Introduction to Ethology: The Biology of Behavior, *by Jean-Claude Ruwet, translated by Joyce Diamanti. New York, International Universities Press, 1973, 208 pp., $10.*

Neurology of Childhood Learning Disorders, *by Richard J. Schain, M.D. Baltimore, Williams & Wilkins Co., 1972, 142 pp., $9.25 (paper).*

Guidelines for Family Care Home Operators, *by Paul J. Schrader, M.D., and Roslyn R. Elms, M.A., R.N. New York, Springer Publishing Co., 1972, 152 pp., $4.25 (paper).*

Clinical Supervision of the Psychiatric Resident, *by Daniel B. Schuster, M.D., John J. Sandt, M.D., and Otto F. Thaler, M.D. New York, Brunner/Mazel, 1972, 328 pp., $10.*

The Goals of Human Sexuality, *by Irving Singer. New York, W.W. Norton & Co., 1973, 213 pp., $6.95.*

Drug Addiction, vol. 2: Clinical and Socio-Legal Aspects, *edited by Jasbir M. Singh, Ph.D., Lyle H. Miller, Ph.D., and Harbans Lal, Ph.D. Mount Kisco, N.Y., Futura Publishing Co., 1972, 284 pp., $13.75.*

Beyond Freedom and Dignity, *by B.F. Skinner. New York, Alfred A. Knopf, 1972, 225 pp., $6.95.*

Differential Diagnosis in Clinical Psychiatry: The Lectures of Paul H. Hoch, M.D., *edited by Margaret O. Strahl, M.D., and Nolan D.C. Lewis, M.D. New York, Science House, 1972, 802 pp., $20.*

Respectable Killing: The New Abortion Imperative, *by K.D. Whitehead. New Rochelle, N.Y., Catholics United for the Faith, 1972, 287 pp., no price listed (paper).*

Clinical Practice in Community Mental Health Centers, *by H.G. Whittington, M.D. New York, International Universities Press, 1972, 157 pp., $8.50.*

Report of the Regional Director, July 1971 to June 1972, *from the World Health Organization, Regional Office for Europe, Copenhagen, 1972, 115 pp., no price listed (paper).*

OFFICIAL ACTIONS

Position Statement on Community Mental Health Centers

This statement was approved by the Board of Trustees of the American Psychiatric Association at its April 29–30, 1972, meeting, upon recommendation of the Council on Mental Health Services. It was prepared by the Task Force to Develop a Position Statement on Community Mental Health Centers.[1] *The Assembly of District Branches endorsed the statement at its November 3–5, 1972, meeting.*

Psychiatry, because of the social aspects of many of the problems it undertakes to remedy and because of its comparatively long and close association with government, has already had both the privilege and the burden of attempting to pioneer comprehensive health services through the vehicle of the community mental health center. The American Psychiatric Association strongly supports the purposes of community mental health centers: 1) to provide ready access to mental health services and related medical and psychosocial care for all persons within a given population who need such services, and 2) to offer a model on which to build in the evolutionary process of constructing a more effective national health system.

The centers are flexible, evolving modalities that are adaptive to cooperative arrangements with comprehensive health centers and broader human services. They operate on a "catchment-area" principle which dictates that they shall assume responsibility for meeting the mental health needs of a defined population without discrimination of any kind and with emphasis on preventive and health maintenance services, as well as on treatment of illness and rehabilitation of patients. This obligates them to render direct and indirect services for a far greater number of persons than was formerly possible, to develop new treatment strategies for categories of patients formerly considered "poor candidates" for therapy, to eliminate long waiting lists, and to develop continuity among service elements.

The integration of services, as among community mental health centers and public and private psychiatric hospitals, must be planned with great care so that the network of mental health services in a catchment area will be rationally organized as a continuum. A key responsibility of the centers is to assist in the development of active treatment and rehabilitation programs in psychiatric hospitals, to obviate the need for hospitalization whenever possible, and to assume immediate responsibility for services to patients who have been hospitalized and have returned to the community. This purpose would be ill served if the centers were to cope only with the acute or most highly treatable patients and were to transfer the least treatable patients to public mental hospitals; doing this would tend to concentrate a treatment-oriented staff in the former and a custodially oriented staff in the latter. Instead, the centers and hospitals both need to be treatment oriented; there must be a choice between them for any given patient, based on differential diagnosis and differing clinical needs. A range of models for effecting liaison between the centers and public mental hospitals should be established.

Because of the disproportionately high incidence of unmet needs for medical care of physical illness in psychiatric patients, because of the greater acceptability of psychiatric care under a "medical" rather than a "mental" aegis, and because of the inseparability of various forms of mental and physical medicine in large numbers of patients, it is necessary to establish close working relationships with the medical community in general and specifically with comprehensive medical centers, where they exist. Various types of relationships between community mental health centers and comprehensive medical programs need to be tested; one of these relationships could be the integration of the former into the latter. The mental health centers should be encouraged to strengthen their ties to primary-care physicians and to psychiatrists in private practice far beyond what has evolved up to this time.

Since social service programs inevitably deal with psychosocial problems in the individuals and families they serve and since health care is inseparable from the other basic human needs of clients, community mental health centers should explore and establish effective patterns for close functional relationships with human service delivery centers. Again, one method of procedure may be an amalgamation of the two programs into an agency approach in comprehensive psychosocial care giving.

Consumers and the representatives of the consumers being served must both share in the decision-making processes governing the development of new organizations for the delivery of health care and in determining the priorities to be assigned to the services offered. In the case of community mental health centers this presupposes that these consumers and local representatives will be cognizant of the boundaries and capabilities of the mental health field. The principle of such participation marks a drastic departure from tradition and poses a host of new challenges to leaders. Nevertheless, if it is not accepted, the organization cannot succeed for lack of local confidence and support; this is particularly true of community mental health centers in inner city areas.

Substantial federal support is currently needed if the community mental health center movement is to survive. Funds should also be forthcoming from other public sectors of government—states, counties, and cities. In addition, fees from patients and third parties must continue to support a significant portion of direct treatment services, and there is some prospect, which should be encouraged, that in time they will also support some preventive and consultation services. Basically, however, new centers cannot now be established, nor can they offer a full

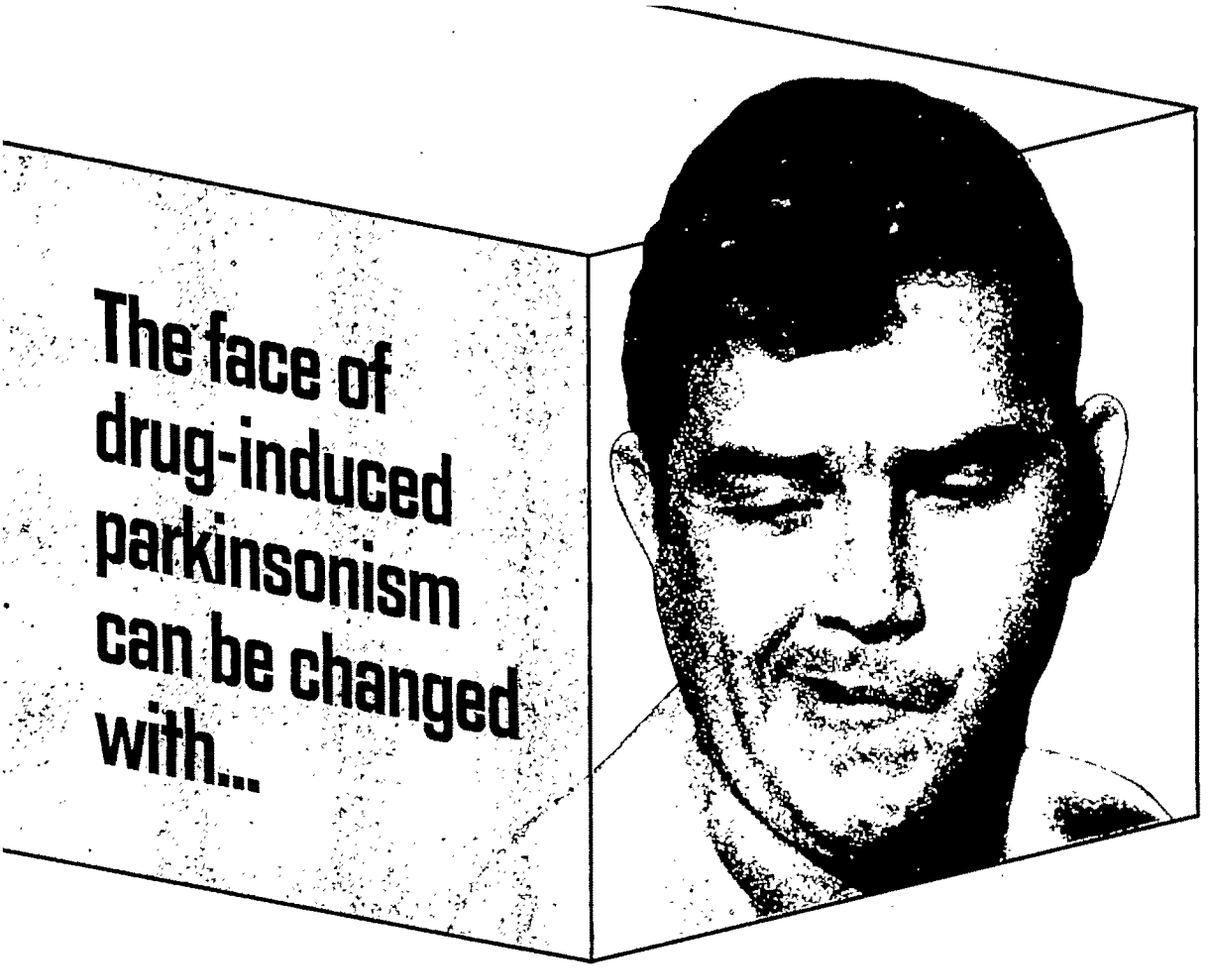
[1] The task force included: Israel Zwerling, M.D., chairman; Alan I. Levenson, M.D.; Lewis Kurke, M.D.; William G. Hollister, M.D.; and Robert H. Barnes, M.D.

range of services, without federal support for construction, for staffing, and for training personnel.

The medical, including psychiatric, treatment program offered by a community mental health center must be the responsibility of a physician, preferably a psychiatrist, and should be directed by him. The center's total program, however, may be under the administrative direction of any health professional who has had adequate training in administration and experience in mental health services.

The inclusion of paraprofessional workers on the staffs of community mental health centers should be encouraged. These workers have facilitated communication and rapport between those who provide services and patients, their families, and the community. Through training and experience, many have successfully undertaken varied therapeutic roles in the centers. It is important, however, if high standards are to be achieved in the quality of care that is rendered, to avoid operating on the false principle that "anybody can do anything." The limits of the roles, responsibilities, and skills of professionals and paraprofessionals should be delineated. An effective in-service training program for paraprofessionals should be provided, as well as regular supervision by appropriate professional staff members.

Educational programs for psychiatrists, including residency and continuing education programs, should be immediately strengthened and rendered more relevant to the unfolding of community psychiatry and most particularly to the services that will be rendered by the community mental health centers.

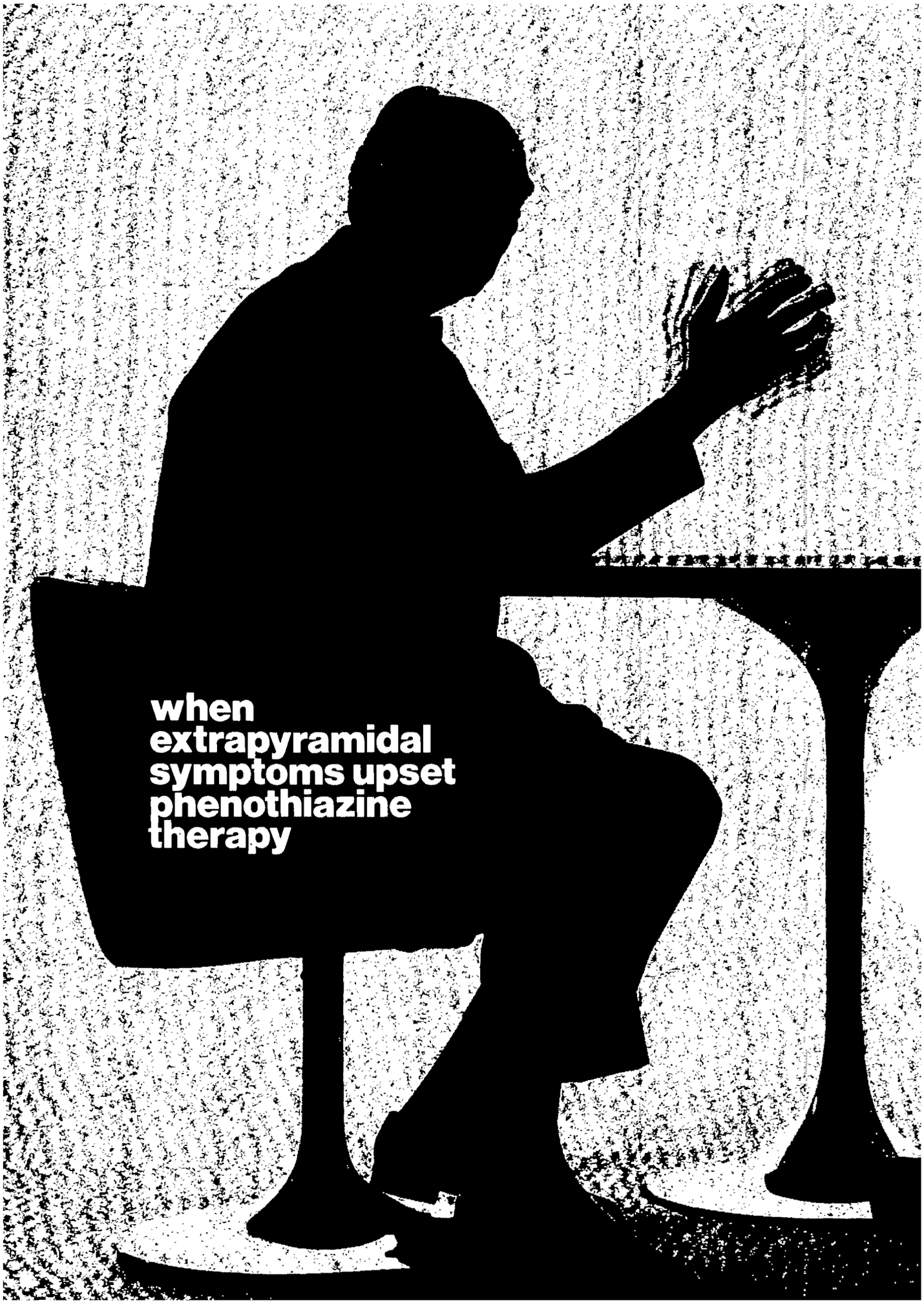


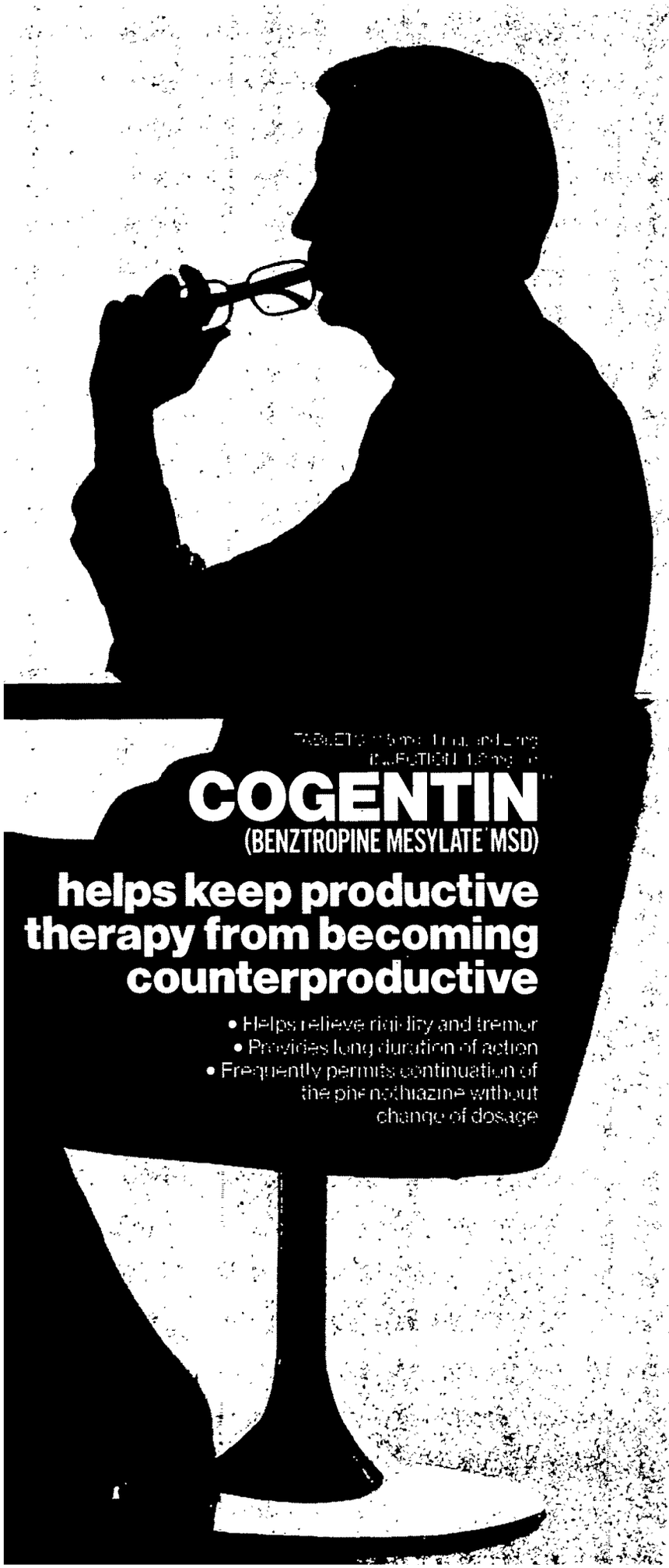
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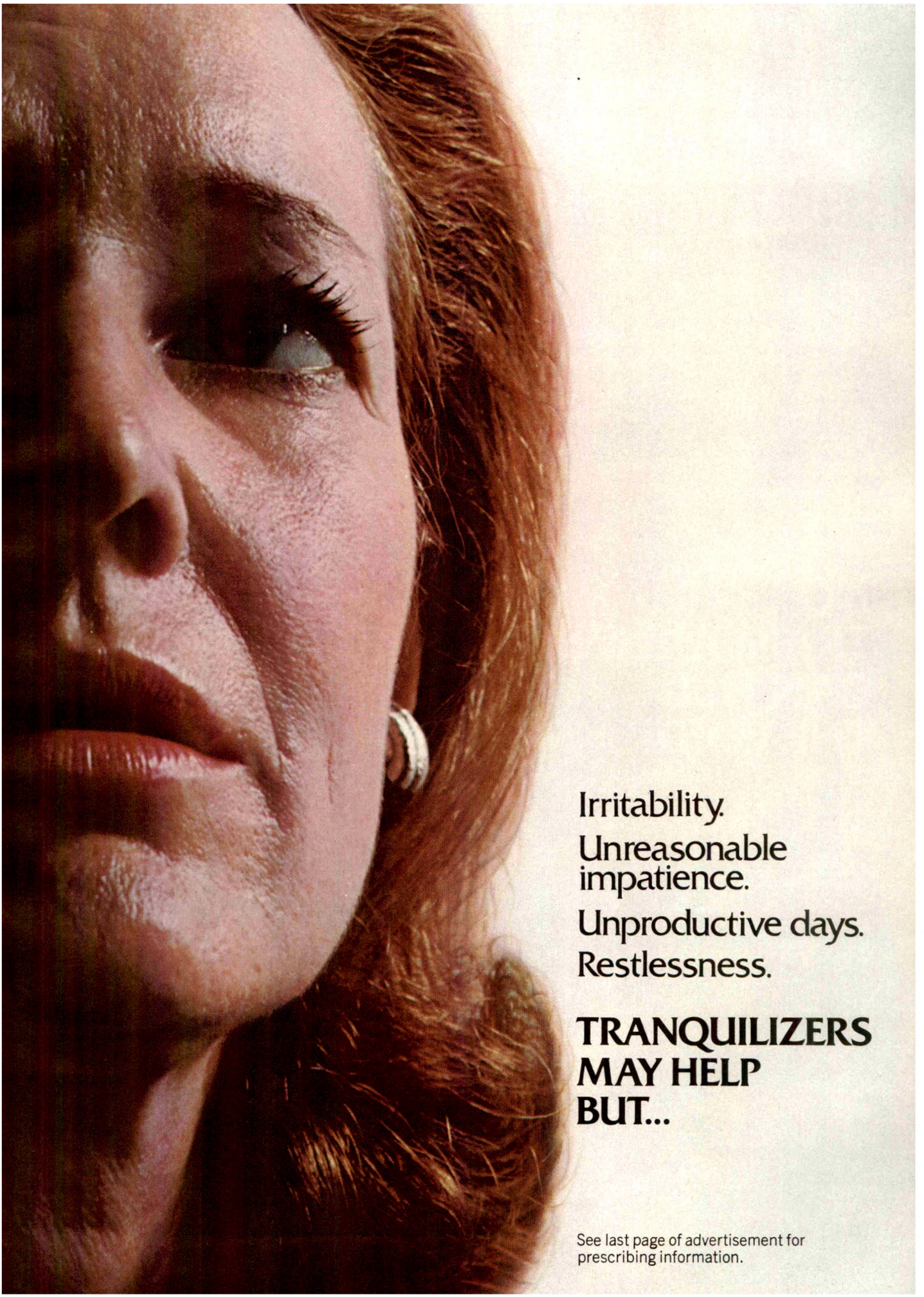
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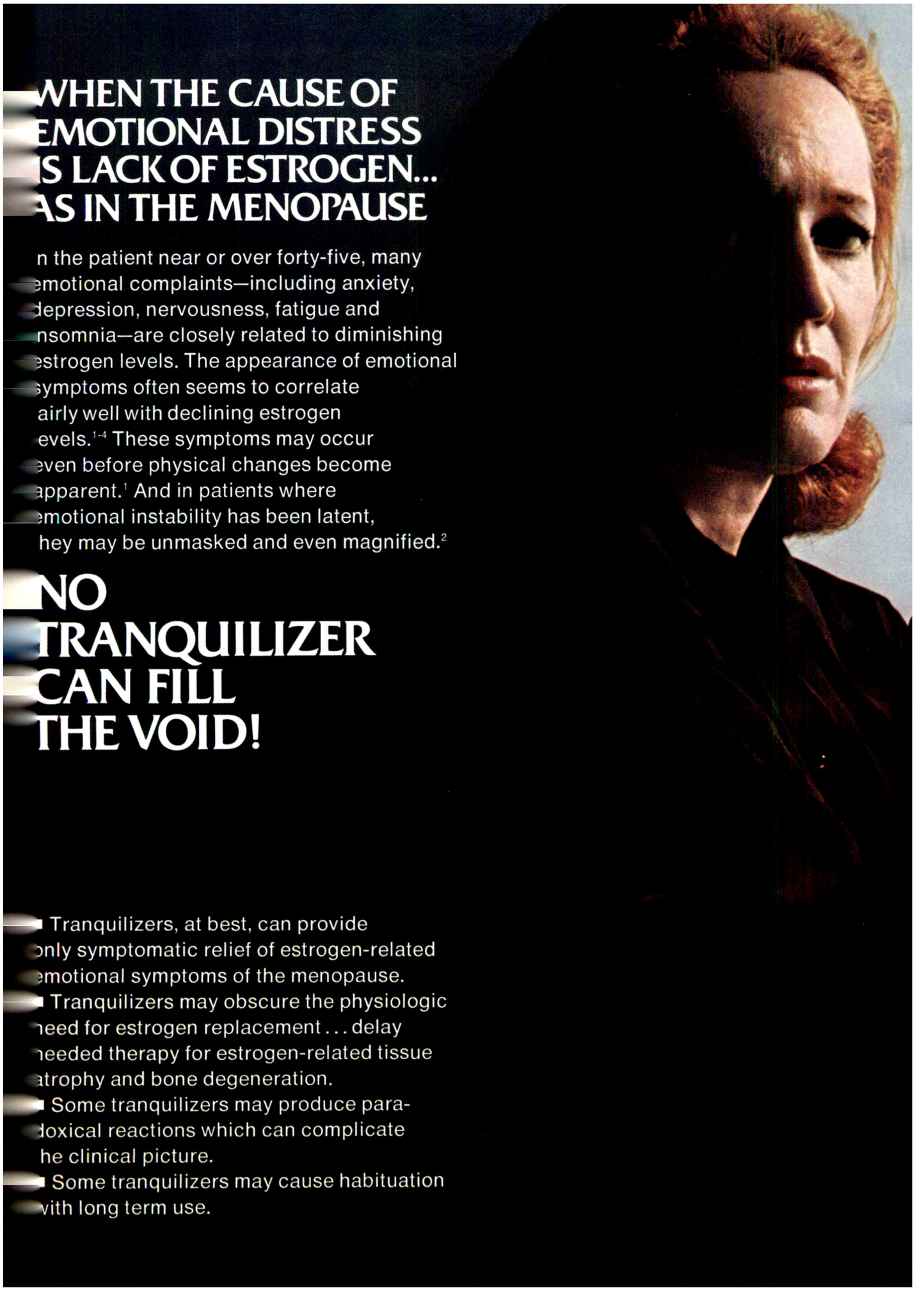
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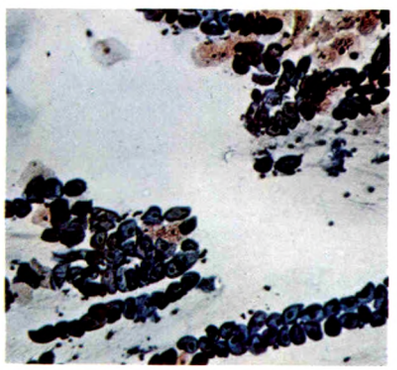
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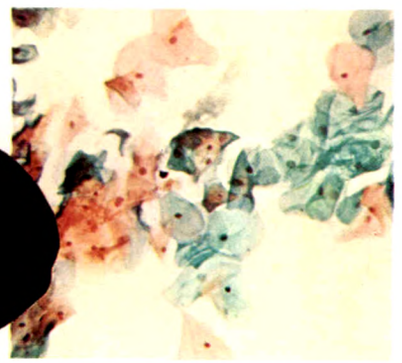
Estrogen-related anxiety and depression usually respond to estrogen replacement therapy in a relatively short time.[3,5] Other "psychogenic" symptoms such as headaches, crying spells, insomnia, feelings of weakness and fatigue may also be relieved.[1,3,4,6] And in a large majority of patients, PREMARIN imparts a renewed sense of well-being.[7] PREMARIN. It gives patients back something they've lost. No tranquilizer can do that.

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Actions: Estrogens are responsible for development and maintenance of the female reproductive system and secondary sex characteristics. They cause the growth and development of the vagina, uterus, and fallopian tubes, and enlargement of the breasts. Indirectly, they contribute to the shaping of the skeleton, maintenance of tone and elasticity of urogenital structures, changes in the epiphyses of the long bones that allow for pubertal growth spurt and termination, growth of axillary and pubic hair, and pigmentation of the nipples and genitals. Estrogens are also involved in psychologic and emotional aspects of feminine behavior. As estrogen levels increase during the menstrual cycle, there is a sense of vigor and well-being, and in the menopausal period estrogens aid in relieving nervous symptoms (e.g. anxiety, depression and irritability) due to estrogen deficiency. Decline of estrogenic activity at the end of the menstrual cycle can bring on menstruation, although the cessation of progesterone secretion is the most important factor in the mature ovulatory cycle. However, in the pre- or non-ovulatory cycle, estrogen is the primary determinant in the onset of menstruation. Estrogens do not induce ovulation.

Estrogens affect calcium and phosphorus metabolism, and are involved in maintenance of normal bone structure. In prolonged estrogen deficiency states, administration of estrogen acts to prevent associated bone degenerative changes.

Estrogens appear to be responsible for the relatively greater amount of alpha-lipoprotein and correspondingly lower amount of beta-lipoprotein found in premenopausal women as compared with men.

Estrogens affect the release of pituitary gonadotropins and may also deplete the gonadotropic content of the pituitary.

Indications: Based on a review of PREMARIN Tablets by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications for use as follows:

Effective: As replacement therapy for naturally occurring or surgically induced estrogen deficiency states associated with: the climacteric, including the menopausal syndrome and postmenopause; senile vaginitis and kraurosis vulvae, with or without pruritus; female hypogonadism; amenorrhea; and primary ovarian failure.

For abnormal uterine bleeding due to hormonal imbalance in the absence of organic pathology such as submucosal fibroids or uterine cancer.

For prevention of postpartum breast engorgement; also for inoperable progressing prostatic cancer (for palliation only when castration is not feasible or when castration failures or delayed escape following a response to castration have not occurred); breast cancer (for palliation only in women with progressing inoperable or roentgen resistant disease who are more than 5 years postmenopausal).

"Probably" effective: For estrogen deficiency-induced osteoporosis, and only when used in conjunction with other important therapeutic measures such as diet, calcium, physiotherapy, and good general health-promoting measures. Final classification of this indication requires further investigation.

Contraindications: Short-acting estrogens are contraindicated in patients with (1) markedly impaired liver function; (2) known or suspected carcinoma of the breast, except those cases of progressing disease not amenable to surgery or irradiation occurring in women who are at least 5 years postmenopausal; (3) known or suspected estrogen-dependent neoplasia, such as carcinoma of the endometrium; (4) thromboembolic disorders, thrombophlebitis, cerebral embolism, or in patients with a past history of these conditions; (5) undiagnosed abnormal genital bleeding.

Warnings: Estrogen therapy should not be given to women with recurrent chronic mastitis or abnormal mammograms except, if in the opinion of the physician, it is warranted despite the possibility of aggravation of the mastitis or stimulation of undiagnosed estrogen-dependent neoplasia.

The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, retinal thrombosis, cerebral embolism and pulmonary embolism). If these occur or are suspected, estrogen therapy should be discontinued immediately.

Estrogens may be excreted in the mother's milk and an estrogenic effect upon the infant has been described. The long range effect on the nursing infant cannot be determined at this time.

Hypercalcemia may occur in as many as 15 percent of breast cancer patients with metastases, and this usually indicates progression of bone metastases. This occurrence depends neither on dose nor on immobilization. In the presence of progression of the cancer or hypercalcemia, estrogen administration should be stopped.

A statistically significant association has been reported between maternal ingestion of diethylstilbestrol during pregnancy and the occurrence of vaginal carcinoma in the offspring. This occurred with the use of diethylstilbestrol for the treatment of threatened abortion or high risk pregnancies. Whether or not such an association is applicable to all estrogens is not known at this time. In view of this finding, however, the use of any estrogen in pregnancy is not recommended.

Failure to control abnormal uterine bleeding or unexpected recurrence is an indication for curettage.

Precautions: As with all short-acting estrogens, the following precautions should be observed:

A complete pretreatment physical examination should be performed with special reference to pelvic and breast examinations.

To avoid prolonged stimulation of the endometrium and breasts in climacteric or hypogonadal women, estrogens should be administered cyclically (3 week regimen with 1 week rest period—withdrawal bleeding may occur during rest period).

Because of individual variation in endogenous estrogen production, relative overdosage may occur which could cause undesirable effects such as abnormal or excessive uterine bleeding, mastodynia and edema.

Because of salt and water retention associated with estrogenic anabolic activity, estrogens should be used with caution in patients with epilepsy, migraine, asthma, cardiac, or renal disease.

If unexplained or excessive vaginal bleeding should occur, re-examination should be made for organic pathology.

Pre-existing uterine fibromyomata may increase in size while using estrogens; therefore, patients should be examined at regular intervals while receiving estrogenic therapy.

The pathologist should be advised of estrogen therapy when relevant specimens are submitted.

Because of their effects on epiphyseal closure, estrogens should be used judiciously in young patients in whom bone growth is incomplete.

Prolonged high dosages of estrogens will inhibit anterior pituitary functions. This should be borne in mind when treating patients in whom fertility is desired.

The age of the patient constitutes no absolute limiting factor, although treatment with estrogens may mask the onset of the climacteric.

Certain liver and endocrine function tests may be affected by exogenous estrogen administration. If test results are abnormal in a patient taking estrogen, they should be repeated after estrogen has been withdrawn for one cycle.

Adverse Reactions: The following adverse reactions have been reported associated with short-acting estrogen administration:

nausea, vomiting, anorexia
gastrointestinal symptoms such as abdominal cramps and bloating
breakthrough bleeding, spotting, unusually heavy withdrawal bleeding (See DOSAGE AND ADMINISTRATION)
breast tenderness and enlargement
reactivation of endometriosis
possible diminution of lactation when given immediately postpartum
loss of libido and gynecomastia in males
edema
aggravation of migraine headaches
change in body weight (increase, decrease)
headache
allergic rash
hepatic cutaneous porphyria becoming manifest

Dosage and Administration: PREMARIN (Conjugated Estrogens Tablets, U.S.P.) should be administered cyclically (3 weeks of daily estrogen and 1 week off) for all indications except selected cases of carcinoma and prevention of postpartum breast engorgement.

Menopausal Syndrome—1.25 mg. daily, cyclically. Adjust dosage upward or downward according to severity of symptoms and response of the patient. For maintenance, adjust dosage to lowest level that will provide effective control.

If the patient has not menstruated within the last two months or more, cyclic administration is started arbitrarily. If the patient is menstruating, cyclic administration is started on day 5 of bleeding. If breakthrough bleeding (bleeding or spotting during estrogen therapy) occurs, increase estrogen dosage as needed to stop bleeding. In the following cycle, employ the dosage level used to stop breakthrough bleeding in the previous cycle. In subsequent cycles, the estrogen dosage is gradually reduced to the lowest level which will maintain the patient symptom-free.

Postmenopause—as a protective measure against estrogen deficiency-induced degenerative changes (e.g. osteoporosis, atrophic vaginitis, kraurosis vulvae)—0.3 mg. to 1.25 mg. daily and cyclically. Adjust dosage to lowest effective level.

Osteoporosis (to retard progression)—usual dosage 1.25 mg. daily and cyclically.

Senile Vaginitis, Kraurosis Vulvae with or without Pruritus—0.3 mg. to 1.25 mg. or more daily, depending upon the tissue response of the individual patient. Administer cyclically.

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—*To stop bleeding*, 3.75 mg. to 7.5 mg. daily, in divided doses. Bleeding can usually be expected to stop within two to five days, but if it has not ceased within this time, an increase in dosage by 50 percent or more is recommended.

—*For Cycle 1*—The dosage required to stop bleeding is continued without interruption for 20 days. Otherwise, breakthrough bleeding will occur. During each of the last 5 to 10 days of estrogen therapy, give an oral progestin. Expect withdrawal bleeding in the next two to five days after cessation of therapy.

—*For Cycles 2, 3, 4*—3.75 mg. daily, in divided doses, for 20 days beginning on the fifth day of bleeding, and a progestin given during the last five days of estrogen therapy. Expect withdrawal bleeding in the next two to five days after cessation of therapy. Treatment is usually given during three or four cycles.

Hypogenitalism—In an attempt to bring about sexual and somatic maturation, 2.5 to 7.5 mg. daily, in divided doses for 20 days, followed by a rest period of 10 days' duration. If bleeding does not occur by the end of this period, the same dosage schedule is repeated. The number of courses of estrogen therapy necessary to produce bleeding may vary depending on the responsiveness of the endometrium.

If bleeding occurs before the end of the 10 day period, begin a 20 day estrogen-progestin cyclic regimen as in Amenorrhea.

Amenorrhea—In order to reproduce the hormone pattern of the ovary whereby there is bleeding from a progestational endometrium, begin a 20 day estrogen-progestin cyclic regimen with PREMARIN, 2.5 to 7.5 mg. daily in divided doses, for 20 days. During the last five days of estrogen therapy, give an oral progestin. If bleeding occurs before this regimen is concluded, therapy is discontinued and may be resumed on the fifth day of bleeding.

Mammary Carcinoma (for palliation in women with progressing inoperable or roentgen resistant disease who are more than 5 years postmenopausal)—Suggested dosage is 10 mg. three times daily for a period of at least three months.

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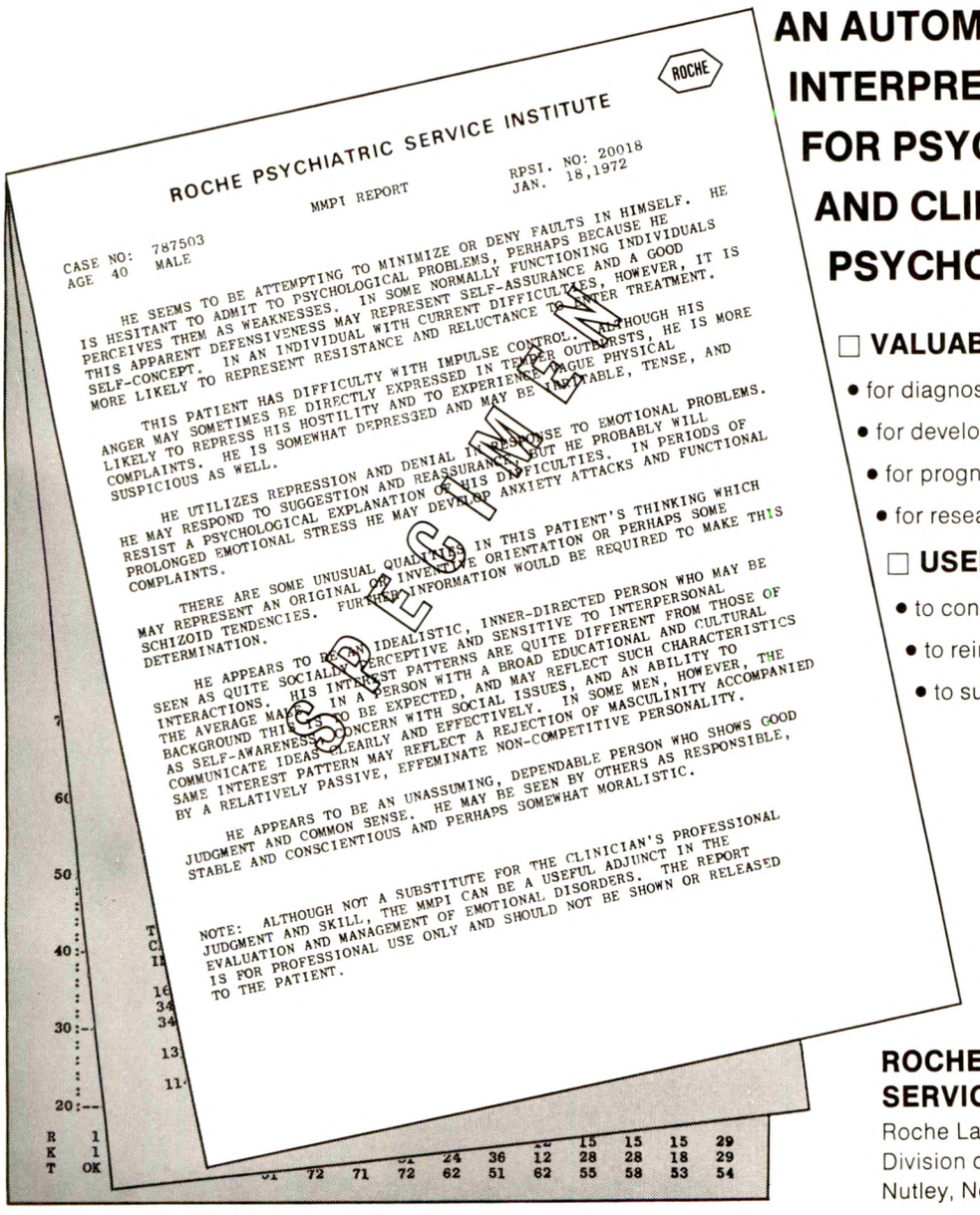
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References: 1. Rhoades, F.P.: J. Amer. Geriatr. Soc. *15*:346 (Apr.) 1967. 2. Greenblatt, R.B., in Conn, H.F. (Ed.): Current Therapy 1970, Philadelphia, W.B. Saunders Company, 1970, p. 757. 3. Kerr, M.D.: Mod. Treatm. 5:587 (May) 1968. 4. Astwood, E.B., in Goodman, L.S., and Gilman, A. (Eds.): The Pharmacological Basis of Therapeutics, ed. 4, New York, The Macmillan Company, 1970, Chap. 69, p. 1538 ff. 5. Penningroth, R.P., and Tourney, G.: Postgrad. Med. 46:118 (July) 1969. 6. Kupperman, H.S.: Medical Aspects of Human Sexuality *1*:64 (Sept.) 1967. 7. Tramont, C.B.: Geriatrics *21*:212 (Nov.) 1966.

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The drug may impair alertness and can potentiate the response to alcohol. Should not be used during the acute recovery phase following myocardial infarction. Should not be given to patients who have received an MAOI within two weeks. TRIAVIL should be used with caution in glaucoma and in patients prone to urinary retention. Contraindicated in CNS depression and in bone marrow depression. Suicide is inherent in any depressive illness. Close supervision of patients is essential until satisfactory remission has taken place. This type of patient should not have easy access to large quantities of the drug.

For a brief summary of prescribing information, please turn to the following page.

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WARNINGS: TRIAVIL should not be given with guanethidine or similarly acting compounds. Use cautiously in patients with history of urinary retention, narrow-angle glaucoma, increased ocular pressure, or convulsive disorders. Patients with cardiovascular disorders should be watched closely. Tricyclic antidepressants, including amitriptyline HCl, particularly in high doses, have been reported to produce arrhythmias, sinus tachycardia, and prolongation of conduction time. Myocardial infarction and stroke have been reported with tricyclic antidepressant drugs. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. Caution patients performing hazardous tasks, such as operating machinery or driving motor vehicles, that drug may impair mental and/or physical abilities.

PRECAUTIONS: Suicide is a possibility in depressed patients and may remain until significant remission occurs. Such patients should not have access to large quantities of this drug.

Perphenazine: Should not be used indiscriminately. Use with caution in patients who have previously exhibited severe adverse reactions to other phenothiazines. Likelihood of untoward actions is greater with high doses. Closely supervise with any dosage.
The antiemetic effect of perphenazine may obscure signs of toxicity due to overdosage of other drugs or make more difficult the diagnosis of disorders such as brain tumor or intestinal obstruction.
A significant, not otherwise explained, rise in body temperature may suggest individual intolerance to perphenazine, in which case discontinue.
If hypotension develops, epinephrine should not be employed, as its action is blocked and partially reversed by perphenazine.
Phenothiazines may potentiate the action of central nervous system depressants (opiates, analgesics, antihistamines, barbiturates, alcohol) and atropine. In concurrent therapy with any of these, TRIAVIL should be given in reduced dosage. May also potentiate the action of heat and phosphorous insecticides.

Amitriptyline: In manic-depressive psychosis, depressed patients may experience a shift toward the manic phase if they are treated with an antidepressant drug. Patients with paranoid symptomatology may have an exaggeration of such symptoms. The tranquilizing effect of TRIAVIL has seemed to reduce the likelihood of this effect.
Supervise closely and carefully adjust dosage when given with anticholinergic agents and sympathomimetic drugs.
The drug may enhance the response to alcohol and the effects of barbiturates and other CNS depressants.
Concurrent administration of amitriptyline HCl and electroshock therapy may increase the hazards of therapy. Such treatment should be limited to patients for whom it is essential.
Discontinue several days before elective surgery if possible. Elevation and lowering of blood-sugar levels have both been reported.

ADVERSE REACTIONS: Similar to those reported with either constituent alone.

Perphenazine: Side effects may be any of those reported with phenothiazine drugs: extrapyramidal symptoms (opisthotonos, oculogyric crises, hyperreflexia, dystonia, akathisia, dyskinesia, parkinsonism) usually controlled by the concomitant use of effective antiparkinsonian drugs and/or by reduction in dosage, but sometimes persist after discontinuation of the phenothiazine; skin disorders (photosensitivity, itching, erythema, urticaria, eczema, up to exfoliative dermatitis); other allergic reactions (asthma, laryngeal edema, angioneurotic edema, anaphylactoid reaction); peripheral edema; reversed epinephrine effect; hyperglycemia; endocrine disturbances (lactation, galactorrhea, disturbances of menstrual cycle); altered cerebrospinal fluid proteins; paradoxical excitement; ECG abnormalities (quinidine-like effect); reactivation of psychotic processes; catatonic-like states; autonomic reactions, such as dryness of the mouth, headache, nausea, vomiting, constipation, obstipation, urinary frequency, blurred vision, nasal congestion, and a change in pulse rate; hypnotic effects; pigmentary retinopathy; corneal and lenticular pigmentation; occasional lassitude; muscle weakness; mild insomnia. Other adverse reactions reported with various phenothiazine compounds include blood dyscrasias (pancytopenia, thrombocytopenic purpura, leukopenia, agranulocytosis, eosinophilia); liver damage (jaundice, biliary stasis); grand mal convulsions; cerebral edema; polyphagia; photophobia; skin pigmentation; and failure of ejaculation.

Amitriptyline: Note: Listing includes a few reactions not reported for this drug, but which have occurred with other pharmacologically similar tricyclic antidepressant drugs. *Cardiovascular:* Hypotension; hypertension; tachycardia; palpitation; myocardial infarction; arrhythmias; heart block; stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus. *Anticholinergic:* Dry mouth; blurred vision; disturbance of accommodation; constipation; paralytic ileus; urinary retention; dilatation of urinary tract. *Allergic:* Skin rash; urticaria; photosensitivity; edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis; eosinophilia; purpura; thrombocytopenia. *Gastrointestinal:* Nausea; epigastric distress; vomiting; anorexia; stomatitis; peculiar taste; diarrhea; parotid swelling; black tongue. *Endocrine:* Testicular swelling and gynecomastia in the male; breast enlargement and galactorrhea in the female; increased or decreased libido; elevated or lowered blood-sugar levels. *Other:* Dizziness; weakness; fatigue; headache; weight gain or loss; increased perspiration; urinary frequency; mydriasis; drowsiness; jaundice; alopecia. *Withdrawal Symptoms:* Abrupt cessation after prolonged administration may produce nausea, headache, and malaise. These are not indicative of addiction.

For more detailed information, consult your MSD Representative or see the Prescribing Information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

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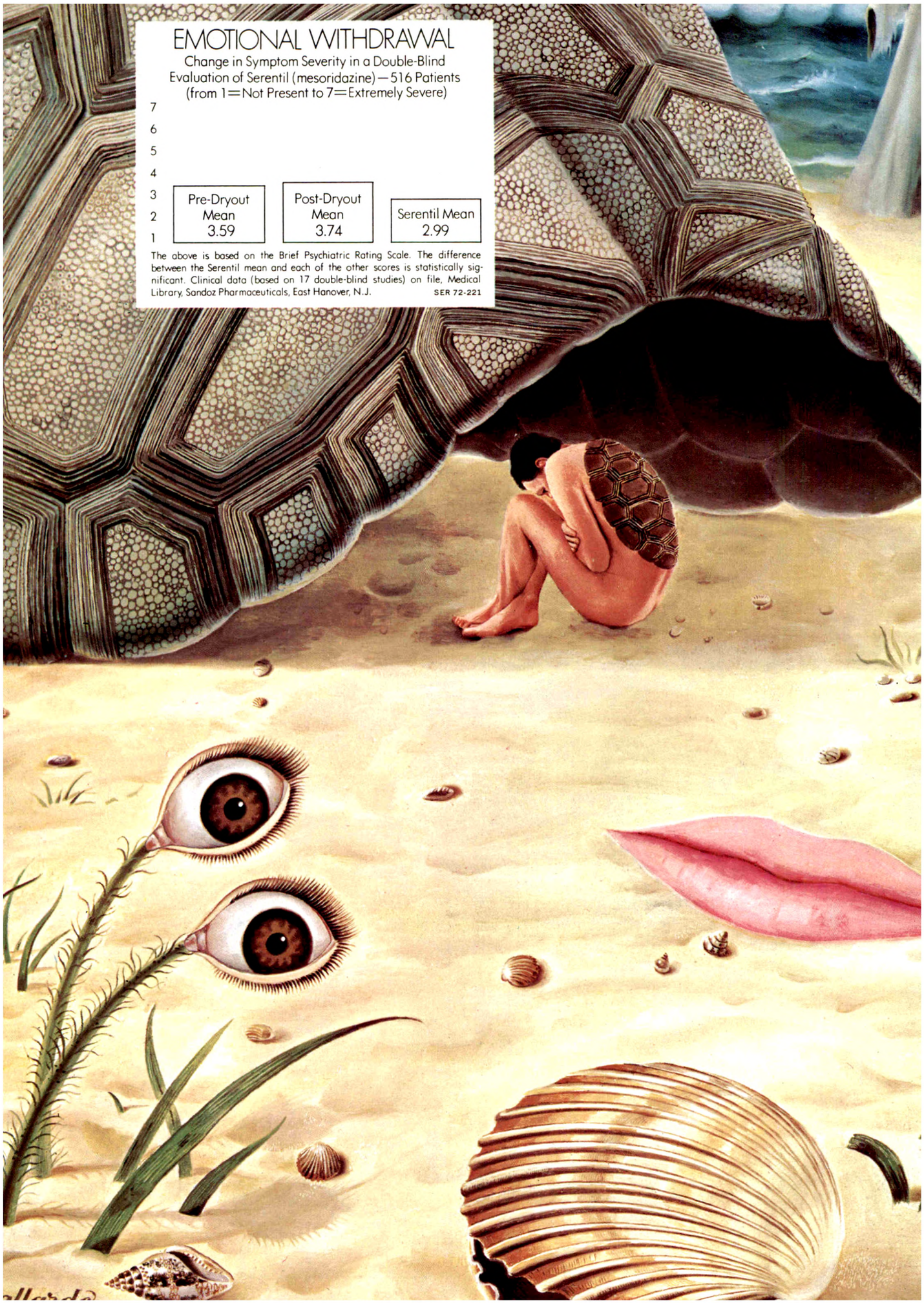
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5
4
3
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See next page for brief summary.

EMOTIONAL WITHDRAWAL
CONCEPTUAL DISORGANIZATION / ANXIETY
TENSION / HALLUCINATORY BEHAVIOR
SUSPICIOUSNESS / BLUNTED AFFECT

One or more of these symptoms in a schizophrenic is an indication for



Contraindications: Severe central nervous system depression, comatose states, hypersensitivity.

Warnings: Increase dosage gradually to patients participating in activities requiring complete mental alertness (e.g., driving). The safety of this drug in pregnancy has not been established; hence, it should be given only when the anticipated benefits to be derived from treatment exceed the possible risks to mother and fetus. Use in children under 12 is not recommended. Phenothiazines are capable of potentiating central nervous system depressants as well as atropine and phosphorus insecticides.

Precautions: Ocular changes (seen with other phenothiazines) have not been seen with Serentil (mesoridazine). Because of possible hypotensive reactions, caution in parenteral use is required. Reserve parenteral administration for bedfast patients or for acute ambulatory cases, and keep patient lying down for at least ½ hour after injection. Leukopenia and/or agranulocytosis have been attributed to phenothiazine therapy. Blood dyscrasia (seen with other phenothiazines) has occurred in a single case of transient granulocytopenia.

Adverse Reactions: Serentil (mesoridazine) has demonstrated a remarkably low incidence of adverse reactions when compared with other phenothiazine compounds. *Central Nervous System:* Drowsiness, Parkinson's syndrome, dizziness, weakness, tremor, restlessness, ataxia, dystonia, rigidity, slurring, akathisia, motoric reactions (opisthotonos). *Autonomic Nervous System:* Dry mouth, nausea and vomiting, fainting, stuffy nose, photophobia, constipation and blurred vision. *Endocrine System:* Inhibition of ejaculation and lactation have been noted rarely. *Skin:* Itching, rash, hypertrophic papillae of the tongue and angioneurotic edema. *Cardiovascular System:* Hypotension, tachycardia, EKG changes.

The following reactions have occurred with phenothiazines and should be considered: *Autonomic Reactions*—Miosis, obstipation, anorexia, paralytic ileus. *Cutaneous Reactions*—Erythema, exfoliative dermatitis, contact dermatitis. *Blood Dyscrasias*—Agranulocytosis, leukopenia, eosinophilia, thrombocytopenia, anemia, aplastic anemia, pancytopenia. *Allergic Reactions*—Fever, laryngeal edema, angioneurotic edema, asthma. *Hepatotoxicity*—Jaundice, biliary stasis. *Cardiovascular Effects*—Changes in terminal portion of electrocardiogram, including prolongation of Q-T interval, lowering and inversion of T-wave, and appearance of a wave tentatively identified as a bifid T or a U wave have been observed with phenothiazines, including Serentil (mesoridazine); these appear to be reversible and due to altered repolarization, not myocardial damage. There is no evidence that these changes are precursors of any significant disturbance of cardiac rhythm. Hypotension, rarely resulting in cardiac arrest. *Extrapyramidal Symptoms*—Akathisia, agitation, motor restlessness, dystonic reactions, trismus, torticollis, opisthotonos, oculogyric crises, tremor, muscular rigidity, and akinesia, occasionally persisting for several months or years especially in elderly patients with brain damage. *Endocrine Disturbances*—Menstrual irregularities, altered libido, gynecomastia, weight gain, false positive pregnancy tests. *Urinary Disturbances*—Retention, incontinence. *Others*—Hyperpyrexia, behavioral effects suggestive of a paradoxical reaction, including excitement, bizarre dreams, aggravation of psychoses, and toxic confusional states; following long-term treatment, a peculiar skin-eye syndrome marked by progressive pigmentation of skin or conjunctiva and/or accompanied by discoloration of exposed sclera and cornea; stellate or irregular opacities of anterior lens and cornea.

Dosage and Administration: ORAL: Should be adjusted to needs of the individual. Lowest effective dosage should always be used. When maximum response is achieved, dosage may be reduced gradually to maintenance level. *Schizophrenia:* For most patients, regardless of severity, starting dose of 50 mg. t.i.d. recommended. Usual optimum total daily dose range 100-400 mg. *Behavioral Problems in Mental Deficiency and Chronic Brain Syndrome:* For most patients starting dose of 25 mg. t.i.d. recommended. Usual optimum total daily dose range 75-300 mg. *Alcoholism:* For most patients usual starting dose is 25 mg. b.i.d. Usual optimum total daily dose range 50-200 mg. *Psychoneurotic Manifestations:* For most patients usual starting dose is 10 mg. t.i.d. Usual optimum total daily dose range 30-150 mg. INJECTABLE FORM: For situations in which an intramuscular form of medication is indicated. For most patients a starting dose of 25 mg. is recommended, to be repeated in 30-60 minutes if necessary. Usual optimum total daily dose range 25-200 mg.

Before prescribing, consult package circular.

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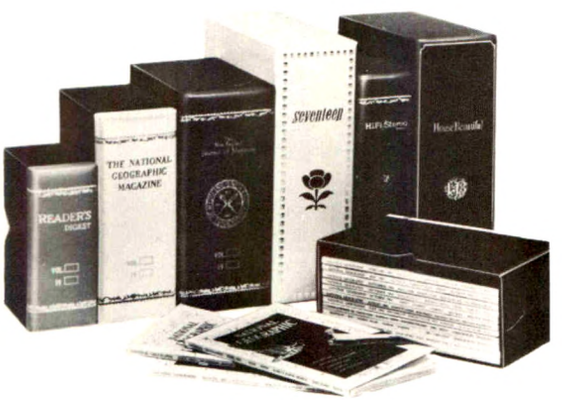
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	Not present	Very mild/ mild	Mod- erate	Moder- ately severe/ severe	Extremely severe
1. Somatic concern	1	2	3	4	5
2. Anxiety	1	2	3	4	5
3. Emotional withdrawal	1	2	3	4	5
4. Guilt feelings	1	2	3	4	5
5. Tension	1	2	3	4	5
6. Depressive mood	1	2	3	4	5
7. Hostility	1	2	3	4	5
8. Motor retardation	1	2	3	4	5
9. Blunted affect	1	2	3	4	5

†With the exception of excessive anxiety and undue tension, the signs and symptoms shown in the Modified BPRS are not in themselves indications for Valium.

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Pharmacology: In animals Valium (diazepam) appears to act on parts of the limbic system, the thalamus and hypothalamus, and induces calming effects. Valium (diazepam), unlike chlorpromazine and reserpine, has no demonstrable peripheral autonomic blocking action, nor does it produce extrapyramidal side effects; however, animals treated with Valium (diazepam) do have a transient ataxia at higher doses. Valium (diazepam) was found to have transient cardiovascular depressor effects in dogs. Long-term experiments in rats revealed no disturbances of endocrine function.

Oral LD_{50} of diazepam is 720 mg/kg in mice and 1240 mg/kg in rats. Intraperitoneal administration of 400 mg/kg to a monkey resulted in death on the sixth day.

Reproduction Studies: A series of rat reproduction studies was performed with diazepam in oral doses of 1, 10, 80 and 100 mg/kg. At 100 mg/kg there was a decrease in the number of pregnancies and surviving offspring in these rats. Neonatal survival of rats at doses lower than 100 mg/kg was within normal limits. Several neonates in these rat-reproduction studies showed skeletal or other defects. Further studies in rats at doses up to and including 80 mg/kg/day did not reveal teratological effects on the offspring.

In humans, measurable blood levels of Valium (diazepam) were obtained in maternal and cord blood, indicating placental transfer of the drug.

Indications: Valium (diazepam) is useful in the symptomatic relief of tension and anxiety states resulting from stressful circumstances or whenever somatic complaints are concomitants of emotional factors. It is useful in psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation.

In acute alcohol withdrawal, Valium (diazepam) may be useful in the symptomatic relief of acute agitation, tremor, impending or acute delirium tremens and hallucinosis.

Valium (diazepam) is a useful adjunct for the relief of skeletal muscle spasm due to reflex spasm to local pathology (such as inflammation of the muscles or joints, or secondary to trauma); spasticity caused by upper motor neuron disorders (such as cerebral palsy and paraplegia); athetosis; and stiff-man syndrome.

Oral Valium (diazepam) may be used adjunctively in convulsive disorders, although it has not proved useful as the sole therapy.

Contraindications: Valium (diazepam) is contraindicated in patients with a known hypersensitivity to this drug and, because of lack of sufficient clinical experience, in children under 6 months of age. It may be used in patients with open angle glaucoma who are receiving appropriate therapy, but it is contraindicated in acute narrow angle glaucoma.

Warnings: Valium (diazepam) is not of value in the treatment of psychotic patients and should not be employed in lieu of appropriate treatment. As is true of most preparations containing CNS-acting drugs, patients receiving Valium (diazepam) should be cautioned against engaging in hazardous occupations requiring complete mental alertness such as operating machinery or driving a motor vehicle.

As with other agents which have anticonvulsant activity, when Valium (diazepam) is used as an adjunct in treating convulsive disorders, the possibility of an increase in the frequency and/or severity of grand mal seizures may require an increase in the dosage of standard anticonvulsant medication. Abrupt withdrawal of Valium (diazepam) in such cases may also be associated with a temporary increase in the frequency and/or severity of seizures.

Since Valium (diazepam) has a central nervous system depressant effect, patients should be advised against the simultaneous ingestion of alcohol and other CNS-depressant drugs during Valium (diazepam) therapy.

Physical and Psychological Dependence: Withdrawal symptoms (similar in character to those noted with barbiturates and alcohol) have occurred following abrupt discontinuance of diazepam (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). These were usually limited to those patients who had received excessive doses over an extended period of time. Particularly addiction-prone individuals (such as drug addicts or alcoholics) should be under careful surveillance when receiving diazepam or other psychotropic agents because of the predisposition

Use in Pregnancy: Use of any drug in pregnancy, lactation or in women of childbearing age requires that the potential benefit of the drug be weighed against its possible hazard to mother and child. (See *Reproduction Studies.*)

Management of Overdosage: Manifestations of Valium (diazepam) overdosage include somnolence, confusion, coma and diminished reflexes. Respiration, pulse and blood pressure should be monitored, as in all cases of drug overdosage, although, in general, these effects have been minimal following overdosage. General supportive measures should be employed, along with immediate gastric lavage. Intravenous fluids should be administered and an adequate airway maintained. Hypotension may be combated by the use of Levophed® (levarterenol) or Aramine (metaraminol). Ritalin (methylphenidate) or caffeine and sodium benzoate may be given to combat CNS-depressive effects. Dialysis is of limited value. As with the management of intentional overdosage with any drug, it should be borne in mind that multiple agents may have been ingested.

Precautions: If Valium (diazepam) is to be combined with other psychotropic agents or anticonvulsant drugs, careful consideration should be given to the pharmacology of the agents to be employed —particularly with known compounds which may potentiate the action of Valium (diazepam), such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants. The usual precautions are indicated for severely depressed patients or those in whom there is any evidence of latent depression; particularly the recognition that suicidal tendencies may be present and protective measures may be necessary. The usual precautions in treating patients with impaired renal or hepatic function should be observed.

In elderly and debilitated patients, it is recommended that the dosage be limited to the smallest effective amount to preclude the development of ataxia or oversedation (2 mg to 2½ mg once or twice daily, initially, to be increased gradually as needed and tolerated).

Adverse Reactions: Side effects most commonly reported were drowsiness, fatigue and ataxia. Infrequently encountered were confusion, constipation, depression, diplopia, dysarthria, headache, hypotension, incontinence, jaundice, changes in libido, nausea, changes in salivation, skin rash, slurred speech, tremor, urinary retention, vertigo and blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances and stimulation have been reported; should these occur, use of the drug should be discontinued.

Because of isolated reports of neutropenia and jaundice, periodic blood counts and liver function tests are advisable during long-term therapy. Minor changes in EEG patterns, usually low-voltage fast activity, have been observed in patients during and after Valium (diazepam) therapy and are of no known significance.

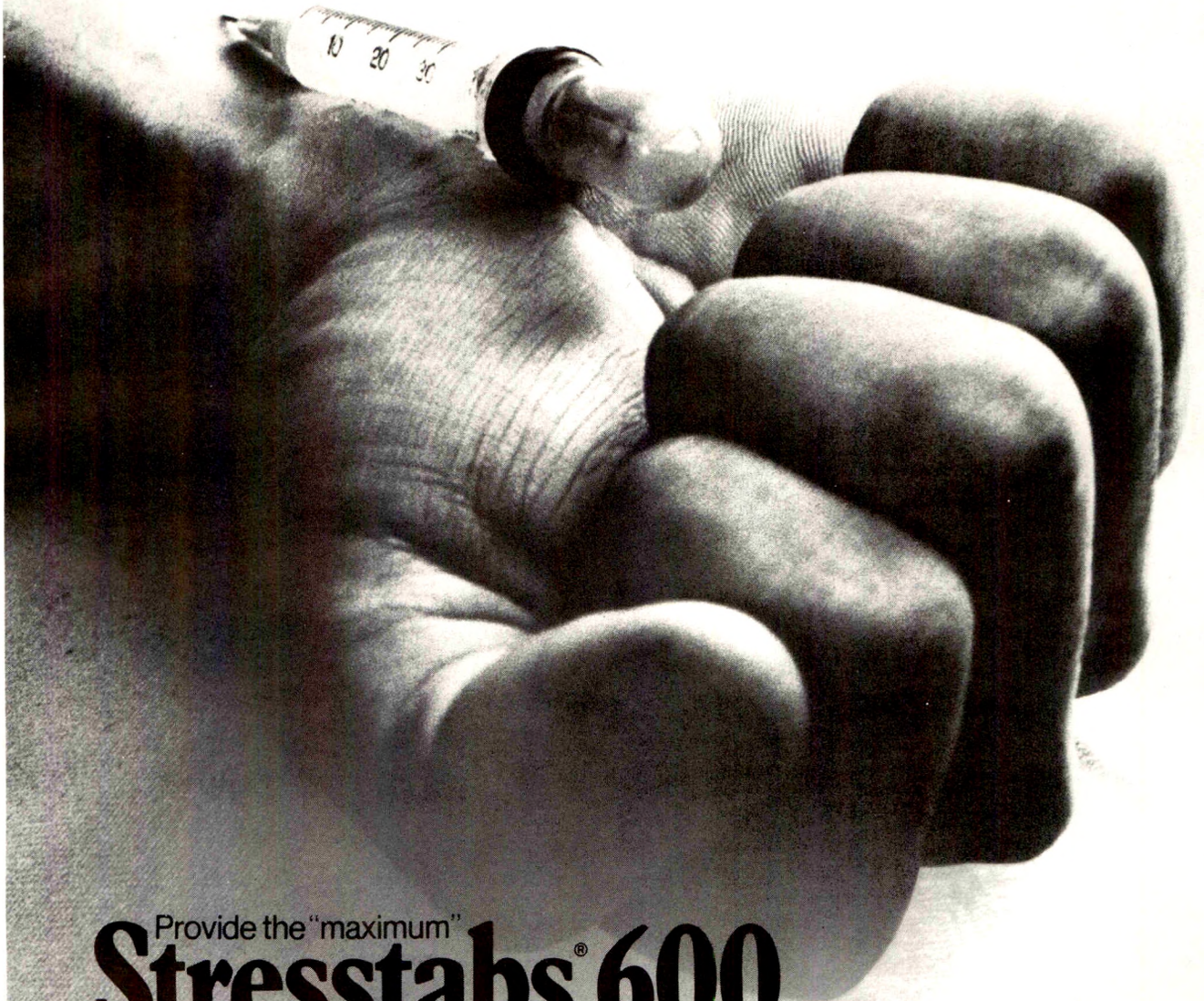
Dosage and Administration: Dosage should be individualized for maximum beneficial effect. While the usual daily dosages given below will meet the needs of most patients, there will be some who may require higher doses. In such cases dosage should be increased cautiously to avoid adverse effects.

Adults:	*USUAL DAILY DOSE*
Symptomatic Relief of Tension and Anxiety States and Psychoneurotic States.	Depending upon severity of symptoms—2 mg to 10 mg, 2 to 4 times daily
Symptomatic Relief in Acute Alcohol Withdrawal.	10 mg, 3 or 4 times during the first 24 hours, reducing to 5 mg, 3 or 4 times daily as needed
Adjunctively for Relief of Skeletal Muscle Spasm.	2 mg to 10 mg, 3 or 4 times daily
Adjunctively in Convulsive Disorders.	2 mg to 10 mg, 2 to 4 times daily
Geriatric Patients, or in the presence of debilitating disease.	2 mg to 2½ mg, 1 or 2 times daily initially; increase gradually as needed and tolerated
Children:	
Because of varied responses to CNS-acting drugs, initiate therapy with lowest dose and increase as required. Not for use in children under 6 months.	1 mg to 2½ mg, 3 or 4 times daily initially; increase gradually as needed and tolerated

How Supplied: For oral administration: Valium (diazepam) scored tablets—2 mg, white; 5 mg, yellow; and 10 mg, blue—bottles of 100 and 500. All strengths also available in Tel-E-Dose® packages of 1000.

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Vitamin B_{12} (as present in concentrated extractives from streptomyces fermentation)	5 mcgm
Vitamin C (as Sodium Ascorbate and Niacinamide Ascorbate)	600 mg (20 MDR)
Niacinamide (as Niacinamide Ascorbate)	100 mg (10 MDR)
Vitamin E (as *d*-Alpha Tocopheryl Acid Succinate)	30 Units
Calcium Pantothenate USP	20 mg

MDR—Adult Minimum Daily Requirement. Recommended Intake: Adults, 1 tablet daily or as directed by physician. Supplied: Bottles of 60 and 500.

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As with other CNS-acting drugs, patients should be cautioned against driving automobiles or operating dangerous machinery until it is known that they do not become drowsy or dizzy on oxazepam therapy. When prescribing, carefully observe dosage recommendations and appropriate precautions, especially as pertaining to the elderly or where a drop in blood pressure might lead to cardiac complications.

In severe anxiety

Serax®
(oxazepam)

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Please see important information on page after next.



Help release her from severe anxiety.



Indications: Oxazepam is indicated for the management and control of anxiety, tension, agitation, irritability and related symptoms. Such symptoms are commonly seen in patients with a diagnosis of psychoneurotic reaction, psychophysiological reaction, personality disorder, or in patients with underlying organic disease.

Anxiety associated with depression is also responsive to oxazepam therapy.

This product has been found particularly useful in the management of anxiety, tension, agitation and irritability in older patients.

Alcoholics with acute tremulousness, inebriation or with anxiety associated with alcohol withdrawal are responsive to therapy.

Contraindications: History of previous hypersensitivity to oxazepam. Oxazepam is not indicated in psychoses.

Warning: *Use in Pregnancy:* Safety for use in pregnancy not established.

Precautions: Hypotensive reactions are rare, but use with caution where complications could ensue from a fall in blood pressure, especially in the elderly. Withdrawal symptoms upon discontinuation have been noted in some patients exhibiting drug dependence through chronic overdose. Carefully supervise dose and amounts prescribed, especially for patients prone to self-overdose; excessive, prolonged use in susceptible patients (alcoholics, ex-addicts, etc.) may result in dependence or habituation. Reduce dosage gradually after prolonged excessive dosage to avoid possible epileptiform seizures. Withdrawal symptoms following abrupt discontinuance are similar to those seen with barbiturates. Caution patients against driving or operating machinery until absence of drowsiness or dizziness is ascertained. Warn patients of possible reduction in alcohol tolerance.

Not indicated in children under 6 years; absolute dosage for 6- to 12-year-olds not established.

Adverse Reactions: Therapy-interrupting side effects are rare. Transient mild drowsiness is common initially; if persistent, reduce dosage. Dizziness, vertigo and headache have also occurred infrequently; syncope, rarely. Mild paradoxical reactions (excitement, stimulation of affect) are reported in psychiatric patients. Minor diffuse rashes (morbilliform, urticarial and maculopapular) are rare. Nausea, lethargy, edema, slurred speech, tremor and altered libido are rare and generally controllable by dosage reduction. Although rare, leukopenia and hepatic dysfunction including jaundice have been reported during therapy. Periodic blood counts and liver function tests are advised. Ataxia, reported rarely, does not appear related to dose or age. These side reactions, noted with related compounds, are not yet reported: paradoxical excitation with severe rage reactions, hallucinations, menstrual irregularities, change in EEG pattern, blood dyscrasias (including agranulocytosis), blurred vision, diplopia, incontinence, stupor, disorientation, fever and euphoria.

Availability: Capsules of 10, 15 and 30 mg. oxazepam; tablets of 15 mg. oxazepam.

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(oxazepam)

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S.V.P.

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It may be mild depression. She needs help...and she needs it now.

Counsel and reassurance may suffice. But if you decide supportive medication is indicated, Ritalin can offer prompt benefit.

Ritalin usually begins to act with the very first dose...boosts spirits and brightens mood...helps the patient get moving again. And Ritalin is generally well tolerated, even by older and convalescent patients. However, Ritalin should not be used for severe depression.

When Ritalin works, one prescription may be enough... to help provide an answer to mild depression.

Ritalin®
(methylphenidate)
helps the patient respond in mild depression*

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TABLETS

INDICATION
Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, FDA has classified the indication as follows:
"Possibly" effective: Mild depression
Final classification of the less-than-effective indications requires further investigation.

CONTRAINDICATIONS
Marked anxiety, tension, and agitation, since Ritalin may aggravate these symptoms. Also contraindicated in patients known to be hypersensitive to the drug and in patients with glaucoma.

WARNINGS
Ritalin is not recommended for children under six years, since safety and efficacy in this age group have not been established.
Since sufficient data on safety and efficacy of long-term use of Ritalin in children with minimal brain dysfunction are not yet available, those requiring long-term therapy should be carefully monitored.
Ritalin should not be used for severe depression of either exogenous or endogenous origin or for the prevention of normal fatigue states.
Ritalin may lower the convulsive threshold in patients with or without prior seizures; with or without prior EEG abnormalities, even in absence of seizures. Safe concomitant use of anticonvulsants and Ritalin has not been established. If seizures occur, Ritalin should be discontinued.
Use cautiously in patients with hypertension.

Drug Interactions
Ritalin may decrease the hypotensive effect of guanethidine. Use cautiously with pressor agents and MAO inhibitors. Ritalin may inhibit the metabolism of coumarin anticoagulants, anticonvulsants (phenobarbital, diphenylhydantoin, primidone), phenylbutazone, and tricyclic antidepressants (imipramine, desipramine). Downward dosage adjustments of these drugs may be required when given concomitantly with Ritalin.

Usage in Pregnancy
Adequate animal reproduction studies to establish safe use of Ritalin during pregnancy have not been conducted. Therefore, until more information is available, Ritalin should not be prescribed for women of childbearing age unless, in the opinion of the physician, the potential benefits outweigh the possible risks.

Drug Dependence
Ritalin should be given cautiously to emotionally unstable patients, such as those with a history of drug dependence or alcoholism, because such patients may increase dosage on their own initiative.
Chronically abusive use can lead to marked tolerance and psychic dependence with varying degrees of abnormal behavior. Frank psychotic episodes can occur, especially with parenteral abuse. Careful supervision is required during drug withdrawal, since severe depression as well as the effects of chronic overactivity can be unmasked. Long-term follow-up may be required because of the patient's basic personality disturbances.

PRECAUTIONS
Patients with an element of agitation may react adversely; discontinue therapy if necessary.
Periodic CBC and platelet counts are advised during prolonged therapy.

ADVERSE REACTIONS
Nervousness and insomnia are the most common adverse reactions but are usually controlled by reducing dosage and omitting the drug in the afternoon or evening.
Other reactions include: hypersensitivity (including skin rash, urticaria, fever, arthralgia, exfoliative dermatitis, and erythema multiforme with histopathological findings of necrotizing vasculitis); anorexia; nausea; dizziness; palpitations; headache; dyskinesia; drowsiness; blood pressure and pulse changes, both up and down; tachycardia; angina; cardiac arrhythmias; abdominal pain; weight loss during prolonged therapy. In children, loss of appetite, abdominal pain, weight loss during prolonged therapy, insomnia, and tachycardia may occur more frequently. Toxic psychosis has been reported.

DOSAGE AND ADMINISTRATION
Adults
Administer orally in divided doses 2 or 3 times daily, preferably 30 to 45 minutes before meals. Dosage will depend upon indication and individual response.
Average dosage is 20 to 30 mg daily. Some patients may require 40 to 60 mg daily. In others, 10 to 15 mg daily will be adequate.
The few patients who are unable to sleep if medication is taken late in the day should take the last dose before 6 p.m.

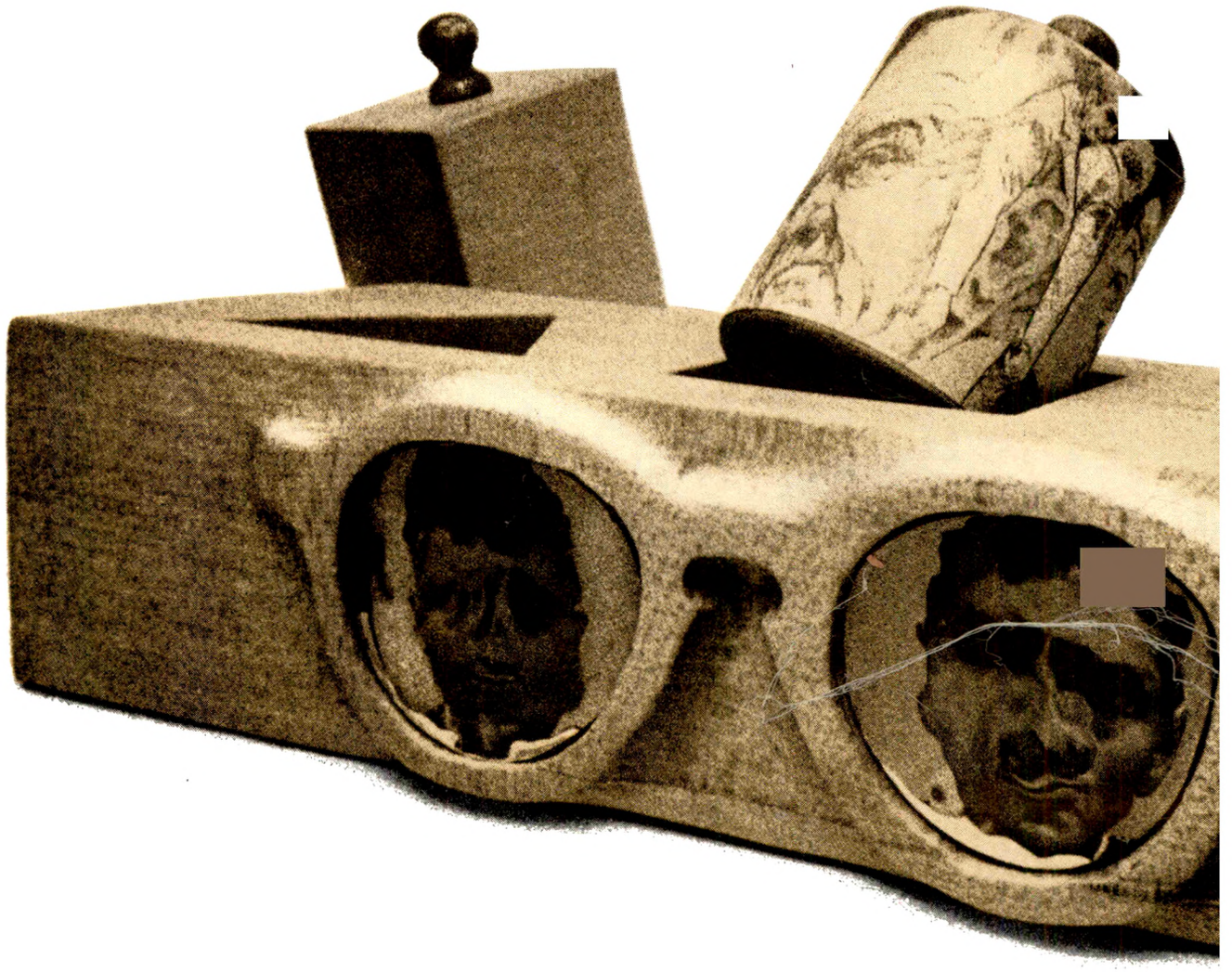
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Tablets, 10 mg (pale green, scored); bottles of 100, 500, 1000 and Strip Dispensers of 100.
Tablets, 5 mg (pale yellow); bottles of 100, 500, and 1000.
Consult complete product literature before prescribing.

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*This drug has been evaluated as possibly effective for this indication. See brief prescribing information.

CIBA

Help improve your depressed patients' ability to cope.



In Brief:

Actions: Norpramin® (desipramine hydrochloride) is an antidepressant drug of the tricyclic type. It has been found in some studies to have a more rapid onset of action than imipramine; antidepressant efficacy is similar though potency on a weight basis may be less. The earliest manifestations consist mainly of an increase in psychomotor activity. Full treatment benefit is seldom attained before the end of the second week.

Indications: Norpramin® (desipramine hydrochloride) is indicated for the relief of depressive symptoms. Endogenous depressions are more likely to be alleviated than others.

Contraindications: Desipramine hydrochloride should not be given within two weeks of treatment with a monoamine oxidase inhibitor. Contraindications include the acute recovery period following myocardial infarction and hypersensitivity to the drug. Cross sensitivity with other dibenzazepines is a possibility.

Warnings: 1. Extreme caution should be used in patients: (a) with cardiovascular disease, (b) with a history of urinary retention or glaucoma, (c) with thyroid disease or those on thyroid medication, (d) with a history of seizure disorder. 2. This drug is capable of blocking the antihypertensive effect of guanethidine and similarly acting compounds. 3. *Use in Pregnancy:* Safe use during pregnancy and lactation has not been established. 4. *Use in Children:* Norpramin® (desipramine hydrochloride) is not recommended for use in children. 5. This drug may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks such as driving a car or operating machinery. Therefore, the patient should be cautioned accordingly.

Precautions: This drug should be dispensed in the least possible quantities to depressed outpatients, since suicide has been accomplished with drugs of this class. It should be kept out of reach of children. Reduce dosage, or alter treatment, if serious adverse effects occur. Norpramin® (desipramine hydrochloride) therapy in patients with manic-depressive illness may induce a hypomanic state after the depressive phase terminates and may cause exacerbation of psychosis in schizophrenic patients. Close supervision and careful adjustment of dosage are required when this drug is given along with anticholinergic or sympathomimetic drugs. While taking this drug, response to alcoholic beverages may be exaggerated. There is limited clinical experience in the concurrent administration of ECT and antidepressant drugs; thus, one should consider the possibility of increased risk relative to benefits. Discontinue as soon as possible prior to elective surgery because of possible cardiovascular effects. Hypertensive episodes have been observed during surgery in patients on desipramine hydrochloride. Leukocyte and differential counts should be performed in any patient who develops fever and sore throat during therapy; the drug should be discontinued if there is neutropenia.

Adverse Reactions: *Cardiovascular:* hypotension, hypertension, tachycardia, palpitation, arrhythmias, heart block, myocardial infarction, stroke. *Psychiatric:* confusional states (especially



Coping with Depression

The ability to cope with depressive illness, for the patient and to some degree for the physician, largely depends on hope—a crutch that is usually lacking in the depressed patient. To the depressed patient all the good things of life are bleak, black, or unattainable; all that is bad has been happening or will happen. Helping such a patient to cope with life again, to overcome the incapacitating moods, outlooks, and fears which characterize depression, can be a most rewarding experience for the physician.

Although Norpramin® (desipramine hydrochloride) is relatively rapid-acting, the patient should be told that he will not feel better immediately but that he will gradually become his old self again. A minor tranquilizer in appropriate dosage may be used with Norpramin temporarily if anxiety due to depression is present; a phenothiazine may be used similarly if agitation is severe.

Frequently, Norpramin and your own understanding of the patient are all that is necessary.

Norpramin®
(desipramine hydrochloride)
helps the depressed cope with life again.

in the elderly), hallucinations, disorientation, delusions; anxiety, agitation; insomnia and nightmares; hypomania; exacerbation of psychosis. *Neurological:* paresthesias of extremities; incoordination, ataxia, tremors, peripheral neuropathy; extrapyramidal symptoms; seizures; alteration in EEG patterns; tinnitus. *Anticholinergic:* dry mouth, and rarely associated sublingual adenitis; blurred vision, disturbance of accommodation, mydriasis; constipation, paralytic ileus; urinary retention, delayed micturition, hypotonic bladder. *Allergic:* skin rash, petechiae, urticaria, itching, photosensitization, edema (of face and tongue or general), drug fever. *Hematologic:* agranulocytosis, eosinophilia, purpura, thrombocytopenia. *Gastrointestinal:* anorexia, nausea and vomiting, epigastric distress, peculiar taste, abdominal cramps, diarrhea, stomatitis, black tongue. *Endocrine:* gynecomastia; breast enlargement and galactorrhea in the female; increased or decreased libido, impotence, testicular swelling; elevation or depression of blood sugar levels. *Other:* jaundice (simulating obstructive), altered liver function; weight gain or loss; perspiration, flushing; urinary frequency, nocturia; parotid swelling; drowsiness, dizziness, weakness and fatigue, headache; alopecia. *Withdrawal Symptoms:* Though not indicative of addiction, abrupt cessation after prolonged therapy may produce nausea, headache and malaise.

Dosage and Administration: *The usual adult dose:* 50 mg. three times daily; increase if necessary after 7 to 10 days to maximum of 200 mg. daily. Dosages above 200 mg. per day are not recommended. *Maintenance:* At a lower dose adequate to maintain remission. *Adolescent and geriatric patient dose:* 25 to 50 mg. daily if necessary.

Overdosage: There is no specific antidote for desipramine, nor are there specific phenomena of diagnostic value characterizing poisoning by the drug. The principles of management of coma and shock by means of the mechanical respirator, cardiac pacemaker, monitoring of central venous pressure and regulation of fluid- and acid-base balance are well known in most medical centers. If heart failure is imminent, digitalize promptly.

How Supplied: Norpramin® (desipramine hydrochloride) *25 mg.*, sugar coated tablets, yellow, in bottles of 50, 500 and 1000 tablets. Norpramin® (desipramine hydrochloride) *50 mg.*, sugar coated tablets, light green, in bottles of 50. 250 and 1000 tablets.

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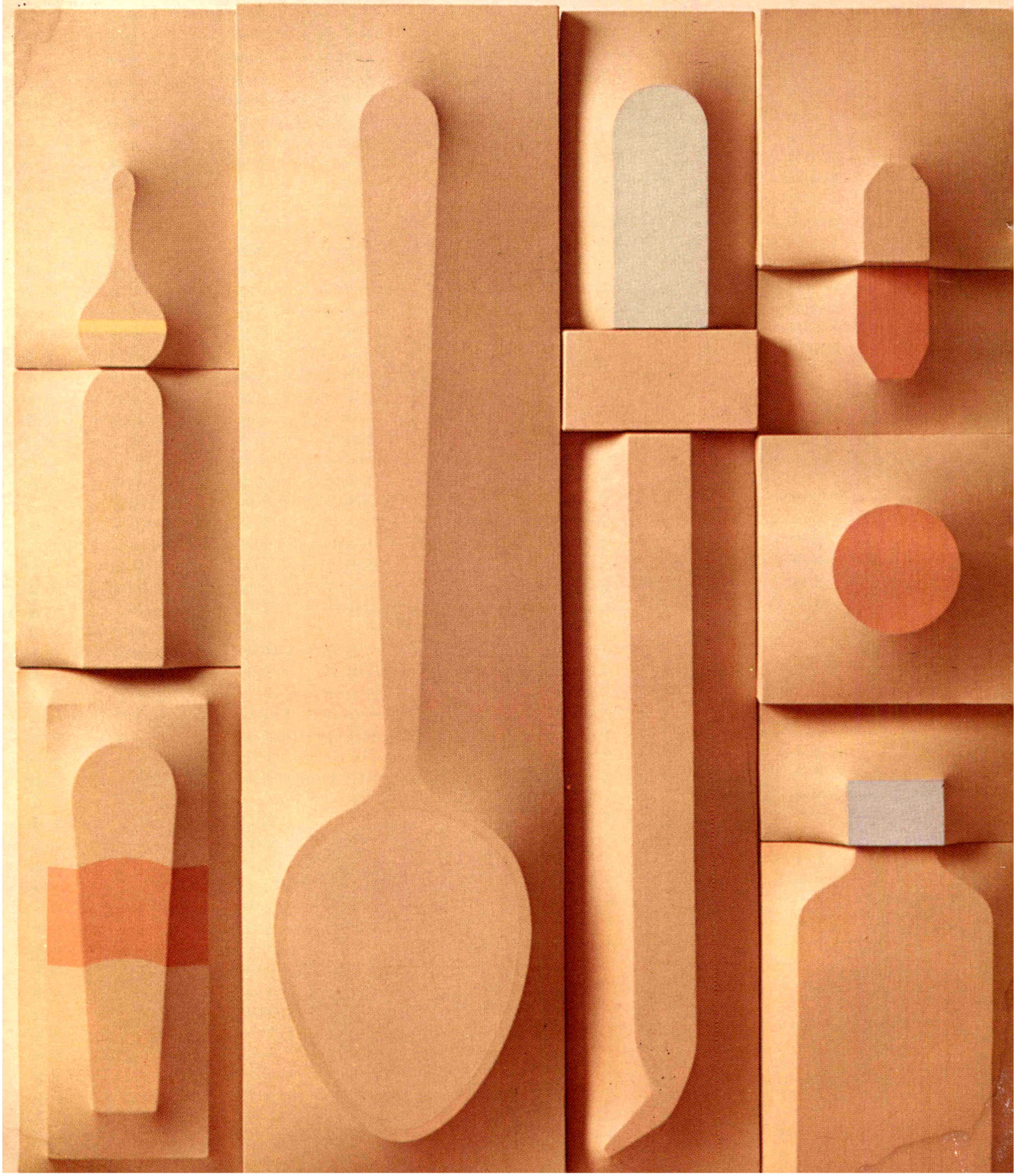
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The American Journal of Psychiatry, formerly *The American Journal of Insanity*, is published monthly by the American Psychiatric Association. Editorial office: 1700 Eighteenth Street, N.W., Washington, D.C. 20009; telephone (202) 232-7878.

Subscriptions: U.S. $15.00 per year, Canada and South America $15.75, other foreign $18.00; single issues: $1.75 plus postage.

APA members should direct changes of address and communications about nonreceipt of the *Journal* to the Manpower Division, American Psychiatric Association, 1700 Eighteenth Street, N.W., Washington, D.C. 20009.

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Advertising representatives: Steven K. Herlitz, Inc., 850 Third Avenue, New York, N.Y. 10022.

Type set by Bru-El Graphic, Inc., 5265 Port Royal Road, Springfield, Va. 22151.

Printed by Dartmouth Printing Co., 69 Lyme Road, Hanover, N.H. 03755.

Second class postage paid at Washington, D.C., and additional mailing offices.

Indexed in *Abstracts for Social Workers, Biological Abstracts, Chemical Abstracts, Cumulative Index to Nursing Literature, Excerpta Medica, Hospital Literature Index, Index Medicus, International Nursing Index, Nutrition Abstracts,* and *Psychological Abstracts.*

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1. Berne E: Principles of Group Treatment. New York, Oxford University Press, 1966, p 26
2. Schildkraut JJ: Tranylcypromine: effects on norepinephrine metabolism in rat brain. Am J Psychiatry 126:925–931, 1970
3. Blackwell B, Marley E, Price J, et al: Hypertensive interactions between monoamine oxidase inhibitors and foodstuffs. Br J Psychiatry 113:349–365, 1967
4. Brosin H: Communication systems of the consultation process, in The Psychiatric Consultation. Edited by Mendel W, Solomon P. New York, Grune & Stratton, 1968, pp 1–12

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For graduate student
John R., lying down
to sleep was a real
eye-opener.
11
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1



Meet John R., age 33.
B.A., *cum laude*
Ph.D. in the making.

But until recently, it looked as if he might not make it. His problem: insomnia. Clinically confirmed. Unwanted wakefulness every night. It was wreaking havoc with his studies. And with his personal relationships, too.

Quāālude®-300 (methaqualone) helped solve John R.'s problem...but under rather unusual circumstances.

John R. volunteered to participate...along with nine other confirmed insomniacs...in a sleep study[1] of experimental design, single blind, to evaluate Quāālude-300 against a placebo. Sequentially, there were three placebo nights, followed by three drug nights, followed by four placebo nights. EEG recordings were obtained continuously from 2300 to 0600 hours. He returned for a second period of 10 days three weeks later.

Goldstein, *et al.*,[2] reported that two statistically significant benefits of Quāālude-300 were apparent in this particular study.

- Time needed for the insomniacs to fall asleep *was reduced.*
- Intermittent periods of wakefulness...so common among insomniacs...*were shorter* when Quāālude was used.

Other clinical studies, plus experience in medical practice throughout the world, have established the therapeutic value of non-barbiturate methaqualone: Quāālude can induce sleep in 10 to 30 minutes; it usually helps produce 6 to 8 hours of restful sleep; Quāālude patients usually awaken easily and without evidence of "hangover."

Side effects reported have been mild, transient, and have often proved to be statistically insignificant when compared to placebo effects. Psychological dependence occasionally occurs, physical dependence rarely reported. (See Brief Summary of Prescribing Information.)

Maybe your patients can benefit as John R. did, by your prescribing Quāālude.

Brief Summary of Prescribing Information

Indications: Sleep. Daytime sedation.

Usual Adult Dose: *For sleep,* 150-300 mg. at bedtime. For patients previously on other hypnotics, 300 mg. for five to seven nights. *For sedation,* 75 mg. t.i.d. or q.i.d. Not recommended in children. Dosage should be individualized for aged, debilitated or highly agitated patients.

Overdosage: Acute overdosage may result in delirium and coma, with restlessness and hypertonia, progressing to convulsions. Evacuate gastric contents, maintain adequate ventilation and support blood pressure, if necessary. Dialysis may be helpful. Analeptics are contraindicated. Succinylcholine accompanied by assisted respiration has been proposed for prolonged convulsions. Overdoses of methaqualone appear to be less often associated with cardiac or respiratory depression than are overdoses of oral barbiturates, but shock and respiratory arrest may occasionally occur.

Contraindications: Contraindicated in women who are or may become pregnant; or patients with known hypersensitivity.

Warnings: Take hypnotic dose only at bedtime. Not recommended in children. Warn patient on Quāālude® (methaqualone) against driving a car or operating dangerous machinery. Care needed when administered with other sedatives, analgesic or psychotropic drugs or alcohol because of possible additive effects. Pending longer clinical experience, Quāālude should not be used continuously for periods exceeding three months. *Psychological dependence* occasionally occurs. *Physical dependence* rarely reported. However, caution needed with addiction-prone patients.

Precautions: Use with caution and prescribe small quantities in patients with anxiety states where impending depression or suicidal tendencies exist. Give in reduced doses, if at all, in patients with impaired hepatic function.

Adverse Reactions: *Neuropsychiatric:* headache, hangover, fatigue, dizziness, torpor, transient paresthesia of the extremities. An occasional patient has experienced restlessness or anxiety. *Hematologic:* aplastic anemia possibly related to methaqualone has been very rarely reported. *Gastrointestinal:* dry mouth, anorexia, nausea, emesis, epigastric discomfort, diarrhea. *Dermatologic:* diaphoresis, bromhidrosis, exanthema. Urticaria has been particularly well documented.

Supplied: Quāālude-150 (150 mg. white, scored tablets). Quāālude-300 (300 mg. white, scored tablets).

Consult complete literature before prescribing.

1. A Comparative Study of the Effects of Methaqualone...on Sleep in Male Chronic Insomniacs, Goldstein, L. *et al.: J. Clin. Pharmacol. 10:* 258-268, 1970.
2. An Analysis of Effects of Methaqualone...on Sleep in Insomniac Subjects, Goldstein, L. *et al.: Res. Communications in Chem. Path. and Pharmacol. 2:* 927-933, 1971.

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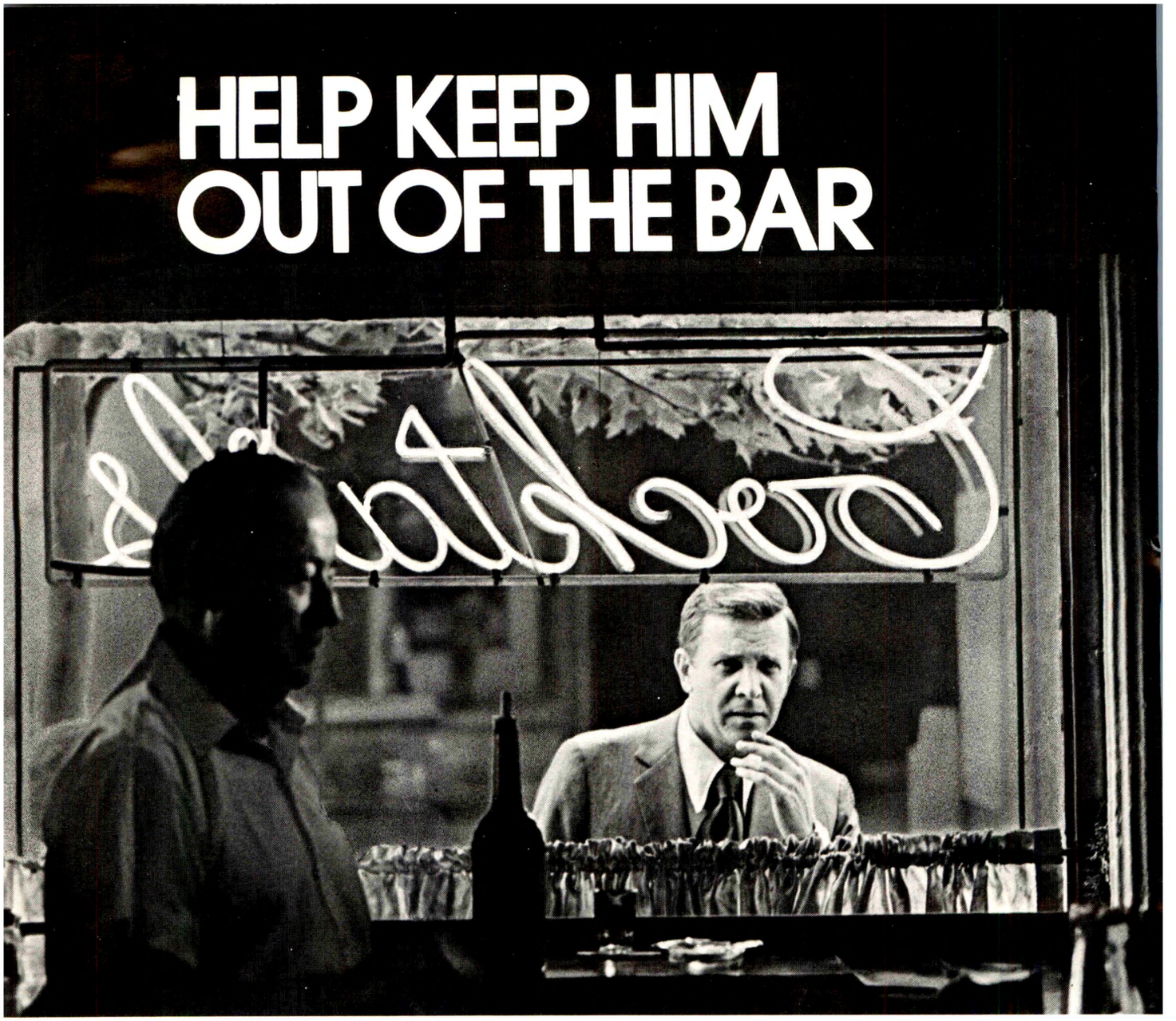
(methaqualone) 300 mg. tablets

For a good morning after a sleep-through night.

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Fort Washington, Pa. 19034

RORER

HELP KEEP HIM OUT OF THE BAR



Bars may draw him like a magnet. Not for social reasons as much as antisocial ones. His drinking hurts himself and others close to him. He's an alcoholic, a public health problem, and a menace behind the wheel of a car. He's ill and needs your help and treatment.

For more than 20 years now, ANTABUSE has proved its effectiveness as a medical adjunct in the management of alcoholics who want to recover. ANTABUSE offers strong deterrent action. It can help keep the alcoholic sober so that he can participate in a total treatment program utilizing many supportive measures.

Once the alcoholic accepts ANTABUSE therapy, he has made his decision to stop drinking. By taking his tablet each day, he daily strengthens his resolve. The patient must be given a clear and detailed description of the effects of ingesting alcohol after he has taken ANTABUSE even up to 14 days after the last dose. ANTABUSE is nonhabituating; there is no danger of cross-addiction.

ANTABUSE®

Brand of DISULFIRAM

a strong deterrent for the alcoholic who doesn't want to drink

See opposite page for brief summary of prescribing information.

ANTABUSE® (DISULFIRAM)

a strong deterrent for the alcoholic who doesn't want to drink



BRIEF SUMMARY *(For full prescribing information, see package circular.)*

ANTABUSE® Brand of disulfiram
In Alcoholism

INDICATION: ANTABUSE is an aid in the management of selected chronic alcoholic patients who want to remain in a state of enforced sobriety so that supportive and psychotherapeutic treatment may be applied to best advantage. (Used alone, without proper motivation and without supportive therapy, ANTABUSE is not a cure for alcoholism, and it is unlikely that it will have more than a brief effect on the drinking pattern of the chronic alcoholic.)

CONTRAINDICATIONS: Patients who are receiving or have recently received metronidazole, paraldehyde, alcohol, or alcohol-containing preparations, *e.g.* cough syrups, tonics, and the like, should not be given ANTABUSE.

ANTABUSE is contraindicated in the presence of severe myocardial disease or coronary occlusion, psychoses, or hypersensitivity.

WARNINGS

ANTABUSE should never be administered to a patient when he is in a state of alcohol intoxication or without his full knowledge.

The physician should instruct relatives accordingly.

The patient must be fully informed of the ANTABUSE-alcohol reaction. He must be strongly cautioned against surreptitious drinking while taking the drug, and he must be fully aware of possible consequences. He should be warned to avoid alcohol in disguised form, *i.e.* in sauces, vinegars, cough mixtures, and even aftershave lotions and back rubs. He should also be warned that reactions may occur with alcohol up to 14 days after ingesting ANTABUSE.

THE ANTABUSE-ALCOHOL REACTION: ANTABUSE plus alcohol, even small amounts, produces flushing, throbbing in head and neck, throbbing headache, respiratory difficulty, nausea, copious vomiting, sweating, thirst, chest pain, palpitation, dyspnea, hyperventilation, tachycardia, hypotension, syncope, marked uneasiness, weakness, vertigo, blurred vision, and confusion. In severe reactions there may be respiratory depression, cardiovascular collapse, arrhythmias, myocardial infarction, acute congestive heart failure, unconsciousness, convulsions, and death.

The intensity of the reaction varies with each individual, but is generally proportional to the amounts of ANTABUSE (disulfiram) and alcohol ingested. Mild reactions may occur in the sensitive individual when the blood alcohol concentration is increased to as little as 5 to 10 mg. per 100 cc. Symptoms are fully developed at 50 mg. per 100 cc., and unconsciousness usually results when the blood alcohol level reaches 125 to 150 mg.

The duration of the reaction varies from 30 to 60 minutes to several hours in the more severe cases, or as long as there is alcohol in the blood.

DRUG INTERACTIONS: Disulfiram appears to decrease the rate at which certain drugs are metabolized and so may increase the blood levels and the possibility of clinical toxicity of drugs given concomitantly.

Disulfiram should be used with caution in those patients receiving diphenylhydantoin and its congeners, since toxic levels of these antiepileptic agents have been reported during concomitant disulfiram therapy.

It may be necessary to adjust the dosage of oral anticoagulants upon beginning or stopping disulfiram, since disulfiram may prolong prothrombin time.

Patients taking isoniazid when disulfiram is given should be observed for the appearance of unsteady gait or marked changes in mental status and the disulfiram discontinued if such signs appear.

CONCOMITANT CONDITIONS: Because of the possibility of an accidental ANTABUSE-alcohol reaction, ANTABUSE (disulfiram) should be used with extreme caution in patients with any of the following conditions: diabetes mellitus, hypothyroidism, epilepsy, cerebral damage, chronic and acute nephritis, hepatic cirrhosis or insufficiency.

USAGE IN PREGNANCY: The safe use of this drug in pregnancy has not been established. Therefore, ANTABUSE should be used during pregnancy only when, in the judgment of the physician, the probable benefits outweigh the possible risks.

PRECAUTIONS: It is suggested that every patient under treatment carry an Identification Card, stating that he is receiving ANTABUSE and describing the symptoms most likely to occur as a result of the ANTABUSE-alcohol reaction. In addition, this card should indicate the physician or institution to be contacted in emergency. (Cards may be obtained from Ayerst Laboratories upon request.)

Alcoholism may accompany or be followed by dependence on narcotics or sedatives. Barbiturates have been administered concurrently with ANTABUSE (disulfiram) without untoward effects, but the possibility of initiating a new abuse should be considered.

Base line and follow-up transaminase tests (10-14 days) are suggested to detect any hepatic dysfunction that may result with ANTABUSE therapy. In addition, a complete blood count and a sequential multiple analysis-12 (SMA-12) test should be made every six months.

ADVERSE REACTIONS: (See Contraindications, Warnings, and Precautions.)

Occasional skin eruptions are, as a rule, readily controlled by concomitant administration of an antihistaminic drug.

In a small number of patients, a transient mild drowsiness, fatigability, impotence, headache, acneform eruptions, allergic dermatitis, or a metallic or garlic-like aftertaste may be experienced during the first two weeks of therapy. These complaints usually disappear spontaneously with the continuation of therapy or with reduced dosage.

Psychotic reactions have been noted, attributable in most cases to high dosage, combined toxicity (with metronidazole or isoniazid), or to the unmasking of underlying psychoses in patients stressed by the withdrawal of alcohol.

There have been reports of polyneuritis and peripheral neuritis, and rare instances of optic neuritis. One case of cholestatic hapatitis has been reported, but its relationship to ANTABUSE has not been unequivocally established.

DOSAGE AND ADMINISTRATION: ANTABUSE (disulfiram) should never be administered until the patient has abstained from alcohol for at least 12 hours.

INITIAL DOSAGE SCHEDULE: In the first phase of treatment, a maximum of 500 mg. daily is given in a single dose for one to two weeks. Although usually taken in the morning, ANTABUSE may be taken on retiring by patients who experience a sedative effect. Alternatively, to minimize, or eliminate, the sedative effect, dosage may be adjusted downward.

MAINTENANCE REGIMEN: The average maintenance dose is 250 mg. daily (range, 125 to 500 mg.); it should not exceed 500 mg. daily.

NOTE: Occasional patients, while seemingly on adequate maintenance doses of ANTABUSE, report that they are able to drink alcoholic beverages with impunity and without any symptomatology. All appearances to the contrary, such patients must be presumed to be disposing of their tablets in some manner without actually taking them. Until such patients have been observed reliably taking their daily ANTABUSE tablets (preferably crushed and well mixed with liquid), it cannot be concluded that ANTABUSE is ineffective.

DURATION OF THERAPY: The daily, uninterrupted administration of ANTABUSE must be continued until the patient is fully recovered socially and a basis for permanent self-control is established. Depending on the individual patient, maintenance therapy may be required for months or even years.

TRIAL WITH ALCOHOL: During early experience with ANTABUSE, it was thought advisable for each patient to have at least one supervised alcohol-drug reaction. More recently, the test reaction has been largely abandoned. Furthermore, it should never be administered to a patient over 50 years of age. A clear, detailed, and convincing description of the reaction is felt to be sufficient in most cases.

However, where a test reaction is deemed necessary, the suggested procedure is as follows:

After the first one to two weeks' therapy with 500 mg. daily, a drink of 15 cc. (½ oz.) of 100 proof whiskey or equivalent is taken slowly. This test dose of alcoholic beverage may be repeated once only so that the total dose does not exceed 30 cc. (1 oz.) of whiskey. Once a reaction develops, no more alcohol should be consumed. Such tests should be carried out only when the patient is hospitalized, or comparable supervision and facilities, including oxygen, are available.

MANAGEMENT OF ANTABUSE (DISULFIRAM)-ALCOHOL REACTION: In severe reactions, whether caused by an excessive test dose or by the patient's unsupervised ingestion of alcohol, supportive measures to restore blood pressure and treat shock should be instituted. Other recommendations include: oxygen, carbogen (95 per cent oxygen and 5 per cent carbon dioxide), vitamin C intravenously in massive doses (1 Gm.), and ephedrine sulfate. Antihistamines have also been used intravenously. Potassium levels should be monitored particularly in patients on digitalis since hypokaliemia has been reported.

HOW SUPPLIED: No. 809—Each tablet (scored) contains 250 mg. disulfiram, in bottles of 100. No. 810—Each tablet (scored) contains 500 mg. disulfiram, in bottles of 50 and 1,000.

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R.S.V.P.

She just doesn't respond to things. No interest. No energy. Discouraged.

It may be mild depression. She needs help...and she needs it now.

Counsel and reassurance may suffice. But if you decide supportive medication is indicated, Ritalin can offer prompt benefit.

Ritalin usually begins to act with the very first dose...boosts spirits and brightens mood...helps the patient get moving again. And Ritalin is generally well tolerated, even by older and convalescent patients. However, Ritalin should not be used for severe depression.

When Ritalin works, one prescription may be enough... to help provide an answer to mild depression.

Ritalin®
(methylphenidate)
helps the patient respond in mild depression*

Ritalin® hydrochloride ℂ
(methylphenidate hydrochloride)
TABLETS

INDICATION
Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, FDA has classified the indication as follows:
"Possibly" effective: Mild depression
Final classification of the less-than-effective indications requires further investigation.

CONTRAINDICATIONS
Marked anxiety, tension, and agitation, since Ritalin may aggravate these symptoms. Also contraindicated in patients known to be hypersensitive to the drug and in patients with glaucoma.

WARNINGS
Ritalin is not recommended for children under six years, since safety and efficacy in this age group have not been established. Since sufficient data on safety and efficacy of long-term use of Ritalin in children with minimal brain dysfunction are not yet available, those requiring long-term therapy should be carefully monitored.
Ritalin should not be used for severe depression of either exogenous or endogenous origin or for the prevention of normal fatigue states.
Ritalin may lower the convulsive threshold in patients with or without prior seizures; with or without prior EEG abnormalities, even in absence of seizures. Safe concomitant use of anticonvulsants and Ritalin has not been established. If seizures occur, Ritalin should be discontinued.
Use cautiously in patients with hypertension.

Drug Interactions
Ritalin may decrease the hypotensive effect of guanethidine. Use cautiously with pressor agents and MAO inhibitors. Ritalin may inhibit the metabolism of coumarin anticoagulants, anticonvulsants (phenobarbital, diphenylhydantoin, primidone), phenylbutazone, and tricyclic antidepressants (imipramine, desipramine). Downward dosage adjustments of these drugs may be required when given concomitantly with Ritalin.

Usage in Pregnancy
Adequate animal reproduction studies to establish safe use of Ritalin during pregnancy have not been conducted. Therefore, until more information is available, Ritalin should not be prescribed for women of childbearing age unless, in the opinion of the physician, the potential benefits outweigh the possible risks.

Drug Dependence
Ritalin should be given cautiously to emotionally unstable patients, such as those with a history of drug dependence or alcoholism, because such patients may increase dosage on their own initiative.
Chronically abusive use can lead to marked tolerance and psychic dependence with varying degrees of abnormal behavior. Frank psychotic episodes can occur, especially with parenteral abuse. Careful supervision is required during drug withdrawal, since severe depression as well as the effects of chronic overactivity can be unmasked. Long-term follow-up may be required because of the patient's basic personality disturbances.

PRECAUTIONS
Patients with an element of agitation may react adversely; discontinue therapy if necessary.
Periodic CBC and platelet counts are advised during prolonged therapy.

ADVERSE REACTIONS
Nervousness and insomnia are the most common adverse reactions but are usually controlled by reducing dosage and omitting the drug in the afternoon or evening.
Other reactions include: hypersensitivity (including skin rash, urticaria, fever, arthralgia, exfoliative dermatitis, and erythema multiforme with histopathological findings of necrotizing vasculitis); anorexia; nausea; dizziness; palpitations; headache; dyskinesia; drowsiness; blood pressure and pulse changes, both up and down; tachycardia; angina; cardiac arrhythmias; abdominal pain; weight loss during prolonged therapy. In children, loss of appetite, abdominal pain, weight loss during prolonged therapy, insomnia, and tachycardia may occur more frequently. Toxic psychosis has been reported.

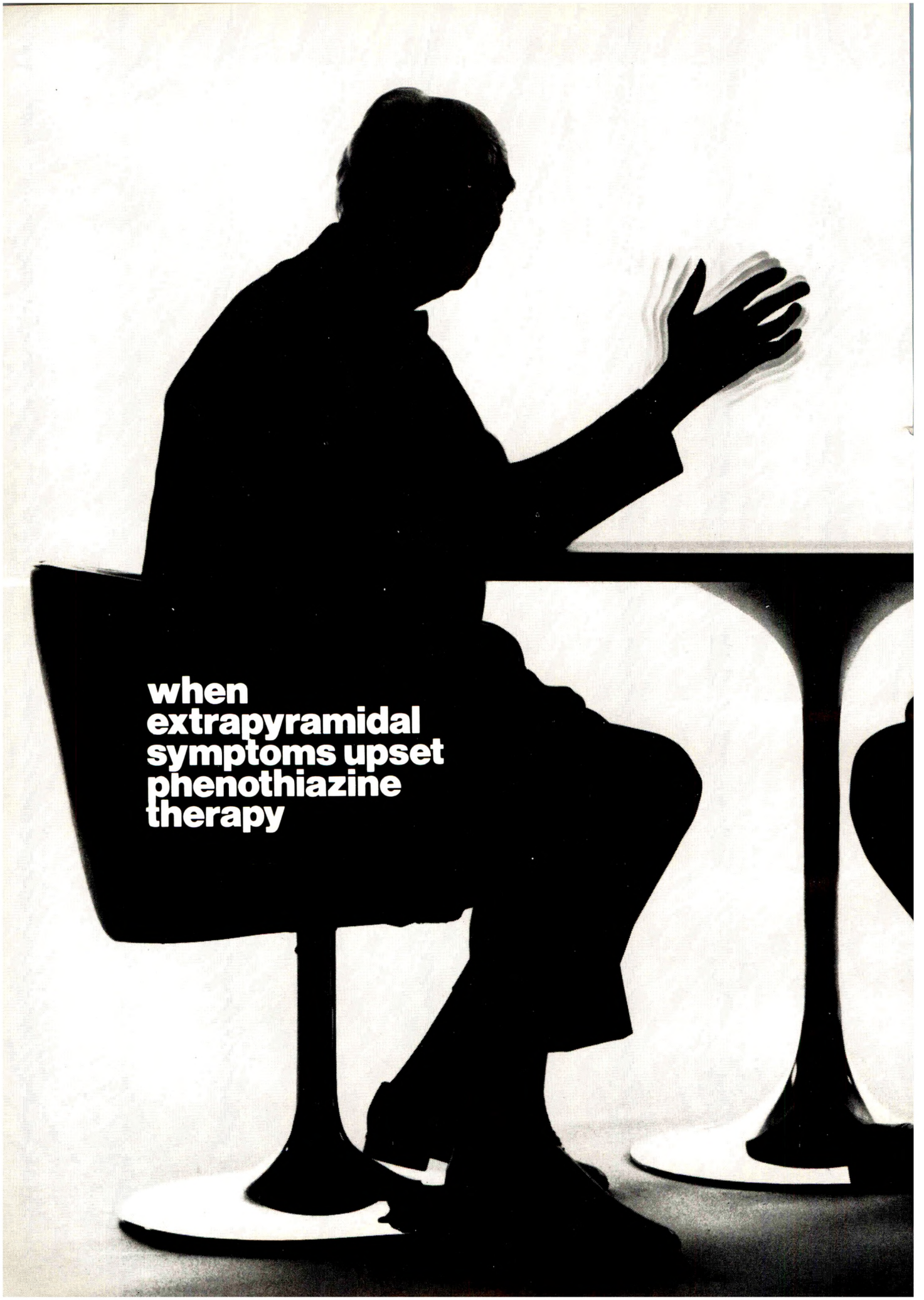
DOSAGE AND ADMINISTRATION
Adults
Administer orally in divided doses 2 or 3 times daily, preferably 30 to 45 minutes before meals. Dosage will depend upon indication and individual response.
Average dosage is 20 to 30 mg daily. Some patients may require 40 to 60 mg daily. In others, 10 to 15 mg daily will be adequate. The few patients who are unable to sleep if medication is taken late in the day should take the last dose before 6 p.m.

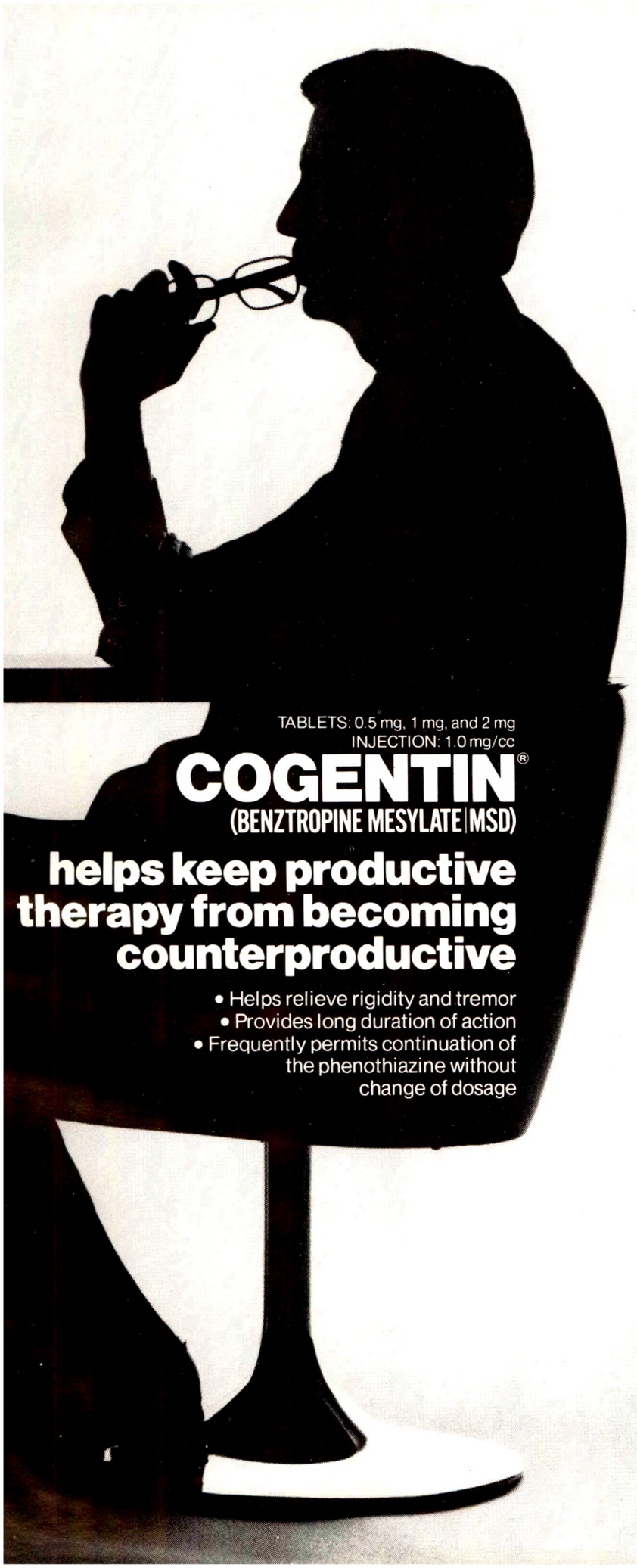
HOW SUPPLIED
Tablets, 20 mg (peach, scored); bottles of 100 and 1000.
Tablets, 10 mg (pale green, scored); bottles of 100, 500, 1000 and Strip Dispensers of 100.
Tablets, 5 mg (pale yellow); bottles of 100, 500, and 1000.
Consult complete product literature before prescribing.

CIBA Pharmaceutical Company
Division of CIBA-GEIGY Corporation
Summit, New Jersey 07901 2/4753 17

*This drug has been evaluated as possibly effective for this indication. See brief prescribing information.

CIBA


when
extrapyramidal
symptoms upset
phenothiazine
therapy



TABLETS: 0.5 mg, 1 mg, and 2 mg
INJECTION: 1.0 mg/cc

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(BENZTROPINE MESYLATE | MSD)

helps keep productive therapy from becoming counterproductive

- Helps relieve rigidity and tremor
- Provides long duration of action
- Frequently permits continuation of the phenothiazine without change of dosage

Contraindications: Children under three years of age; use cautiously in older children.

Warnings: Safe use in pregnancy not established. May impair mental and/or physical abilities required for performance of hazardous tasks, such as operating machinery or driving a motor vehicle.

Precautions: Because of cumulative action, continued supervision is advisable. Closely observe patients with tendencies to tachycardia or hypotension and those with prostatic hypertrophy. Dysuria may occur, but rarely becomes a problem. Large doses may cause complaints of weakness and inability to move particular muscle groups, requiring dosage adjustment.
Mental confusion and excitement may occur with large doses, or in susceptible patients; visual hallucinations reported occasionally. May intensify mental symptoms when used to treat extrapyramidal disorders due to CNS drugs, such as reserpine and phenothiazines, in patients with mental disorders; in such patients, increased doses of antiparkinsonian drugs can precipitate toxic psychosis; observe patients carefully, especially at the beginning of treatment or if dosage is increased. Masking action on possible development of permanent extrapyramidal symptoms with prolonged phenothiazine therapy has not been investigated. Patients with a poor mental outlook are usually poor candidates for therapy.
May produce anhidrosis; give with caution during hot weather, especially to the old, the chronically ill, the alcoholic, those who have central nervous system disease, those who do manual labor in a hot environment, and those with disturbances in sweating. If anhidrosis appears, reduce dosage so that ability to maintain body heat equilibrium is not impaired. Occurrence of glaucoma is a possibility; probably should not be used in angle-closure glaucoma.
Large doses generally cannot be tolerated by older patients, thin patients, or patients with arteriosclerotic parkinsonism. Do not terminate other antiparkinsonism agents abruptly; reduce gradually. In drug-induced parkinsonism, closely observe patients for severe reactions, and temporarily discontinue COGENTIN (Benztropine Mesylate, MSD) If they appear; do not extend therapy longer than necessary to counteract the extrapyramidal disorders; although the psychotropic drug frequently can be continued without change of dosage, a decrease might be indicated.

Adverse Reactions: Adverse reactions may be anticholinergic and/or antihistaminic. Dry mouth, blurred vision, nausea, nervousness may develop. If dry mouth causes difficulty in swallowing or speaking, or loss of appetite and weight, reduce dosage, or discontinue drug temporarily. Vomiting occurs infrequently and may be controlled by temporary discontinuation, followed by resumption at a lower dosage. Constipation, numbness of the fingers, listlessness, and depression may develop. Occasionally, an allergic reaction, e.g., skin rash, develops; sometimes this can be controlled by reducing dosage, but occasionally requires discontinuation.

Supplied: Tablets in three strengths: 0.5 mg and 1 mg benztropine mesylate, in bottles of 100, and 2 mg benztropine mesylate, in bottles of 100 and 1000. Injection, containing 1.0 mg benztropine mesylate and 9.0 mg sodium chloride per cc, in 2-cc ampuls.

For more detailed information, consult your MSD representative or see the Direction Circular. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

MSD MERCK SHARP & DOHME

Help release her from severe anxiety. Then she can open up to you.



Only with relief of the severe anxiety that often blocks verbalization can many patients expect to progress in therapy. To this end, Serax may prove beneficial, for it is now well established as an effective antianxiety adjunct. Serax offers flexibility as well. Dosage can be readily adjusted to individual needs. To the point where the patient may frequently resume normal work activities.

As with other CNS-acting drugs, patients should be cautioned against driving automobiles or operating dangerous machinery until it is known that they do not become drowsy or dizzy on oxazepam therapy. When prescribing, carefully observe dosage recommendations and appropriate precautions, especially as pertaining to the elderly or where a drop in blood pressure might lead to cardiac complications.

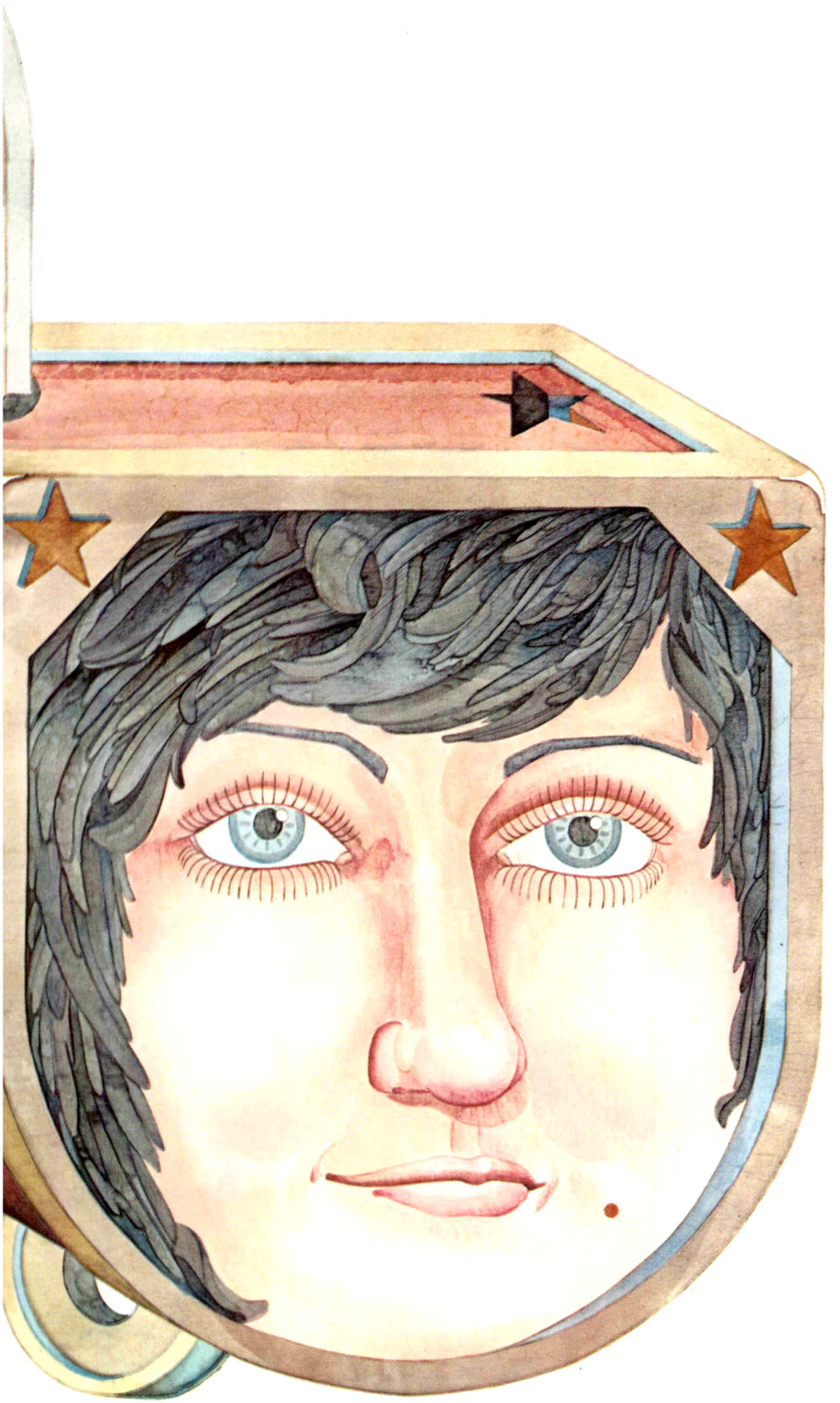
In severe anxiety

Serax®

(oxazepam)

Wyeth Laboratories
Philadelphia, Pa. 19101

Please see important information on page after next.



Help release her from severe anxiety.



Indications: Oxazepam is indicated for the management and control of anxiety, tension, agitation, irritability and related symptoms. Such symptoms are commonly seen in patients with a diagnosis of psychoneurotic reaction, psychophysiological reaction, personality disorder, or in patients with underlying organic disease.

Anxiety associated with depression is also responsive to oxazepam therapy.

This product has been found particularly useful in the management of anxiety, tension, agitation and irritability in older patients.

Alcoholics with acute tremulousness, inebriation or with anxiety associated with alcohol withdrawal are responsive to therapy.

Contraindications: History of previous hypersensitivity to oxazepam. Oxazepam is not indicated in psychoses.

Warning: *Use in Pregnancy:* Safety for use in pregnancy not established.

Precautions: Hypotensive reactions are rare, but use with caution where complications could ensue from a fall in blood pressure, especially in the elderly. Withdrawal symptoms upon discontinuation have been noted in some patients exhibiting drug dependence through chronic overdose. Carefully supervise dose and amounts prescribed, especially for patients prone to self-overdose; excessive, prolonged use in susceptible patients (alcoholics, ex-addicts, etc.) may result in dependence or habituation. Reduce dosage gradually after prolonged excessive dosage to avoid possible epileptiform seizures. Withdrawal symptoms following abrupt discontinuance are similar to those seen with barbiturates. Caution patients against driving or operating machinery until absence of drowsiness or dizziness is ascertained. Warn patients of possible reduction in alcohol tolerance.

Not indicated in children under 6 years; absolute dosage for 6- to 12-year-olds not established.

Adverse Reactions: Therapy-interrupting side effects are rare. Transient mild drowsiness is common initially; if persistent, reduce dosage. Dizziness, vertigo and headache have also occurred infrequently; syncope, rarely. Mild paradoxical reactions (excitement, stimulation of affect) are reported in psychiatric patients. Minor diffuse rashes (morbilliform, urticarial and maculopapular) are rare. Nausea, lethargy, edema, slurred speech, tremor and altered libido are rare and generally controllable by dosage reduction. Although rare, leukopenia and hepatic dysfunction including jaundice have been reported during therapy. Periodic blood counts and liver function tests are advised. Ataxia, reported rarely, does not appear related to dose or age. These side reactions, noted with related compounds, are not yet reported: paradoxical excitation with severe rage reactions, hallucinations, menstrual irregularities, change in EEG pattern, blood dyscrasias (including agranulocytosis), blurred vision, diplopia, incontinence, stupor, disorientation, fever and euphoria.

Availability: Capsules of 10, 15 and 30 mg. oxazepam; tablets of 15 mg. oxazepam.

Serax®
(oxazepam)

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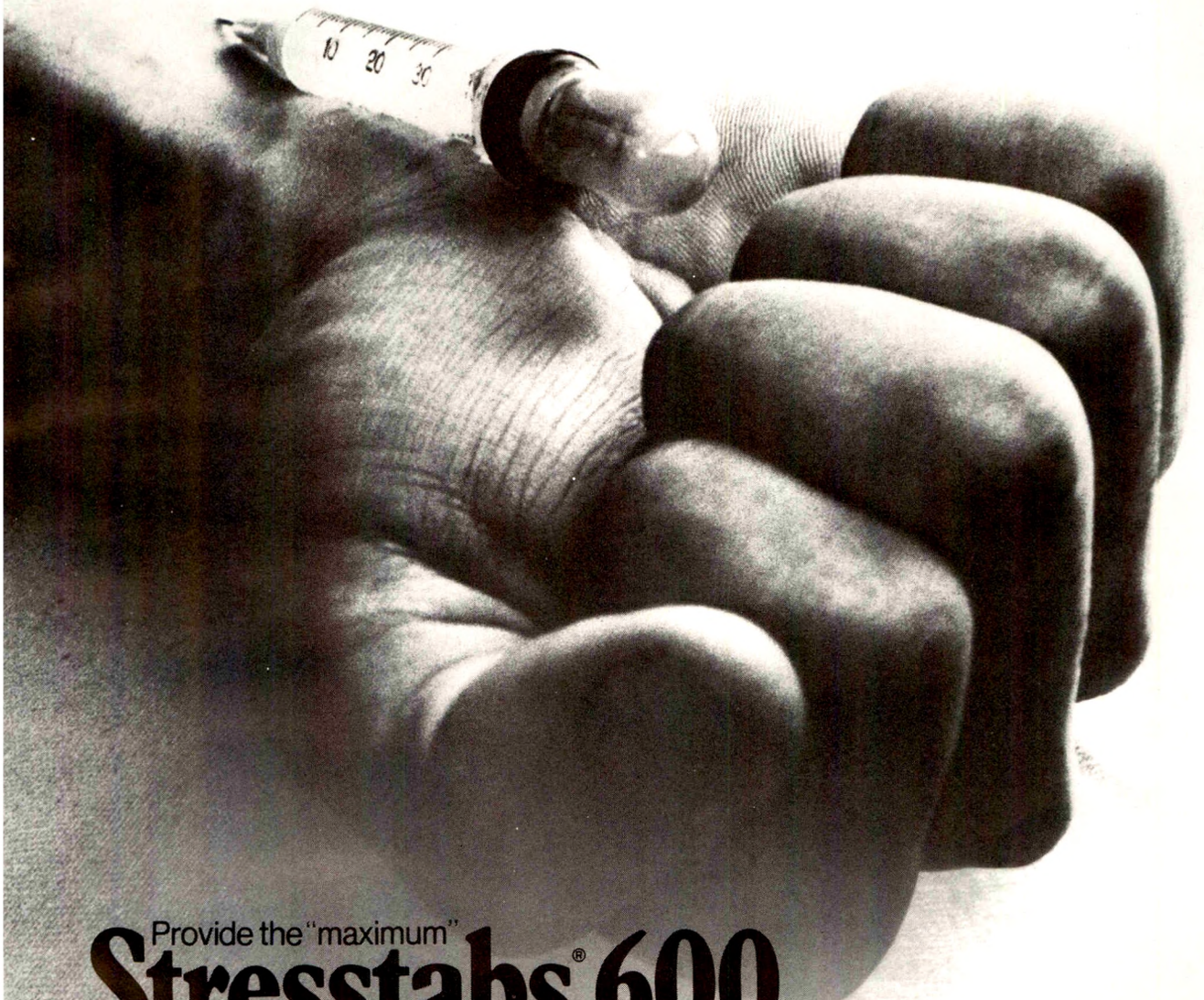
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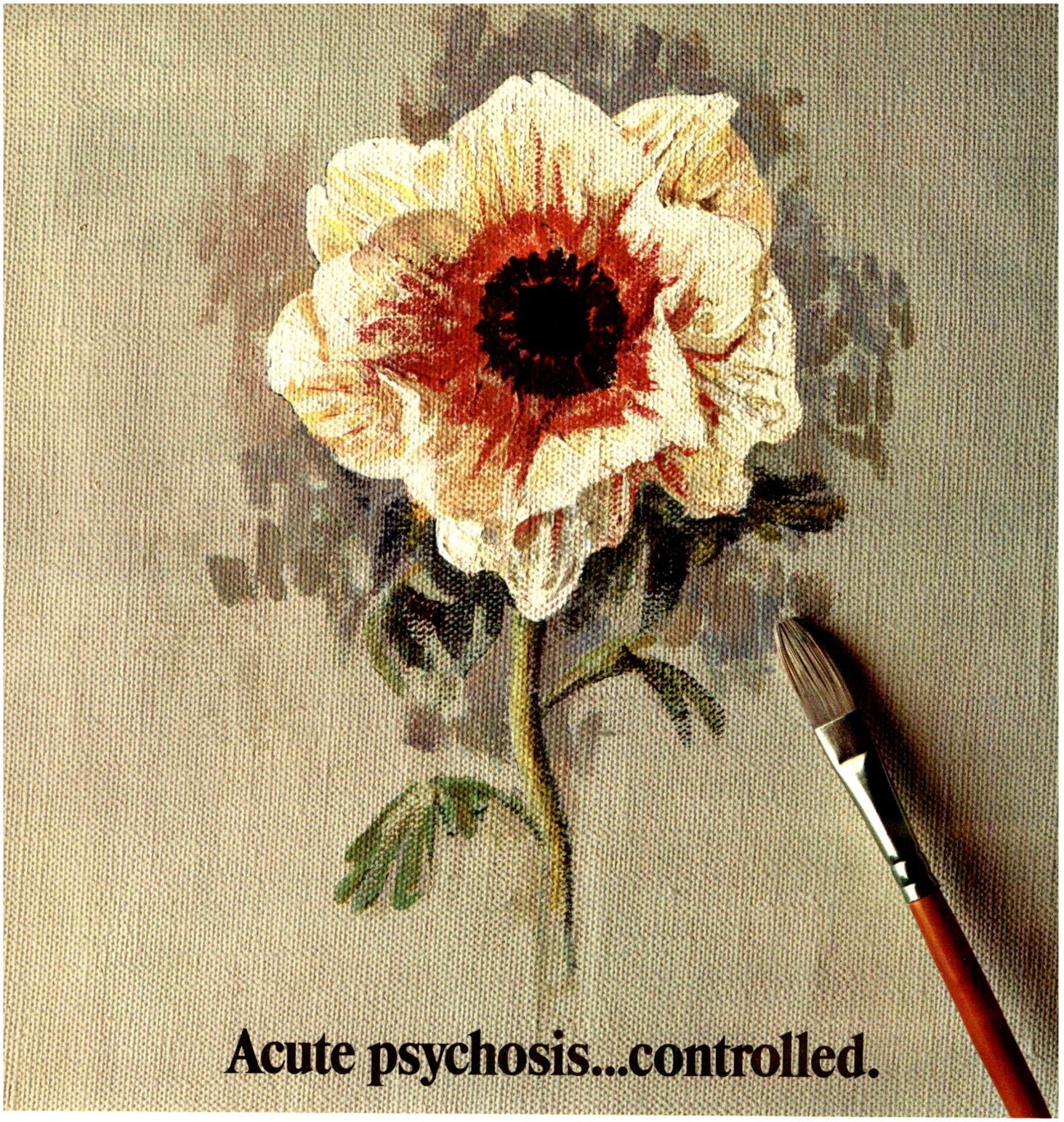
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Vitamin B_1 (as Thiamine Mononitrate)	15 mg (15 MDR)
Vitamin B_2 (Riboflavin)	15 mg (12½ MDR)
Vitamin B_6 (Pyridoxine Hydrochloride)	5 mg
Vitamin B_{12} (as present in concentrated extractives from streptomyces fermentation)	5 mcgm
Vitamin C (as Sodium Ascorbate and Niacinamide Ascorbate)	600 mg (20 MDR)
Niacinamide (as Niacinamide Ascorbate)	100 mg (10 MDR)
Vitamin E (as *d*-Alpha Tocopheryl Acid Succinate)	30 Units
Calcium Pantothenate USP	20 mg

MDR—Adult Minimum Daily Requirement. Recommended Intake: Adults, 1 tablet daily or as directed by physician. Supplied: Bottles of 60 and 500.

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Navane (thiothixene) helps reduce the intensity and frequency of acute psychotic symptoms. With Navane, confusion, disorientation and other manifestations of acute psychosis may be controlled. And, as acute symptomatology decreases, the patient may be better able to readjust to therapeutic, family and community relationships and responsibilities. Navane...an effective anti-psychotic for acute psychosis.

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A division of Pfizer Pharmaceuticals
New York, New York 10017

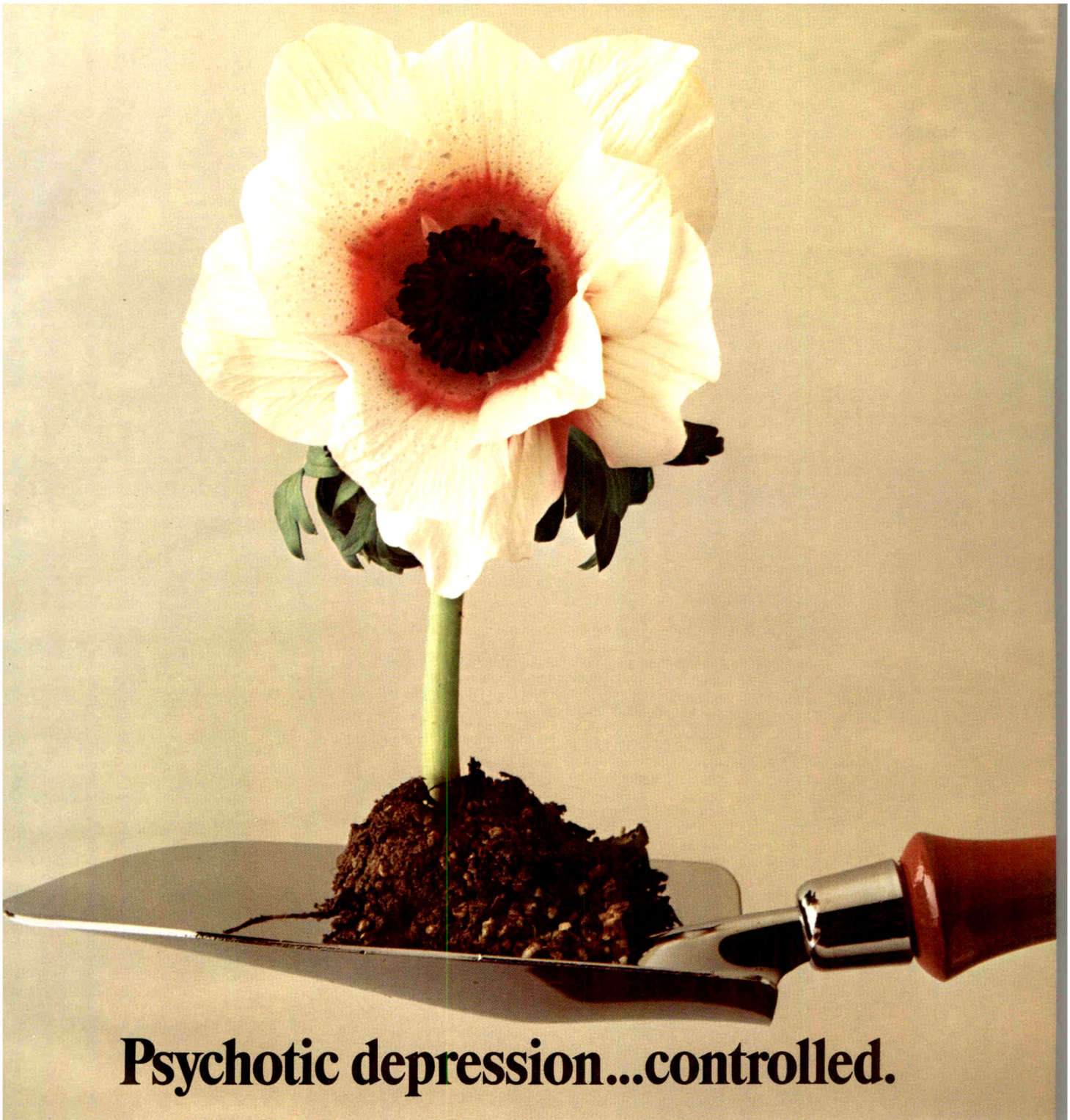
Navane®

(thiothixene) (thiothixene hydrochloride)

Capsules 1 mg., 2 mg., 5 mg., 10 mg. Concentrate 5 mg./cc., Intramuscular 2 mg./cc.

to help control psychotic behavior

For prescribing information, including adverse reactions and contraindications, please see last page of this advertisement



Psychotic depression...controlled.

Navane (thiothixene) helps reduce the intensity and frequency of depression as manifested in psychotic disorders. Mental and motor retardation may be replaced by an increasing interest in self and environment and a return to productive activity. Severe mood disorders may be relieved to encourage cooperation with therapy and daily routine. Navane...an effective anti-psychotic.

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Navane®

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Capsules 1 mg., 2 mg., 5 mg., 10 mg. Concentrate 5 mg./cc., Intramuscular 2 mg./cc.

to help control psychotic depression

For prescribing information, including adverse reactions and contraindications, please see following page.

Navane® (thiothixene) (thiothixene hydrochloride)

Capsules: 1 mg., 2 mg., 5 mg., 10 mg. **Concentrate: 5 mg./cc.** **Intramuscular: 2 mg./cc.**

PRESCRIBING INFORMATION
Navane® (thiothixene)
Capsules 1 mg., 2 mg., 5 mg., 10 mg.
(thiothixene hydrochloride)
Concentrate 5 mg./cc., Intramuscular 2 mg./cc.

Actions. Navane is a psychotropic agent of the thioxanthene series. Navane possesses certain chemical and pharmacological similarities to the piperazine phenothiazines and differences from the aliphatic group of phenothiazines. Navane's mode of action has not been clearly established.

Indications. Navane is effective in the management of manifestations of psychotic disorders.

Contraindications. Navane is contraindicated in patients with circulatory collapse, comatose states, central nervous system depression due to any cause, and blood dyscrasias. Navane is contraindicated in individuals who have shown hypersensitivity to the drug. It is not known whether there is a cross-sensitivity between the thioxanthenes and the phenothiazine derivatives, but this possibility should be considered.

Warnings. *Usage in Pregnancy* – Safe use of Navane during pregnancy has not been established. Therefore, this drug should be given to pregnant patients only when, in the judgment of the physician, the expected benefits from the treatment exceed the possible risks to mother and fetus. Animal reproduction studies and clinical experience to date have not demonstrated any teratogenic effects.

In the animal reproduction studies with Navane (thiothixene), there was some decrease in conception rate and litter size, and an increase in resorption rate in rats and rabbits, changes which have been similarly reported with other psychotropic agents. After repeated oral administration to rats (5 to 15 mg./kg./day), rabbits (3 to 50 mg./kg./day), and monkeys (1 to 3 mg./kg./day) before and during gestation, no teratogenic effects were seen. (See Precautions.)

Usage in children—The use of Navane in children under 12 years of age is not recommended because safety and efficacy in the pediatric age group have not been established.

As is true with many CNS drugs, Navane may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks such as driving a car or operating machinery, especially during the first few days of therapy. Therefore, the patient should be cautioned accordingly.

As in the case of other CNS-acting drugs, patients receiving Navane should be cautioned about the possible additive effects (which may include hypotension) with CNS depressants and with alcohol.

Precautions. An antiemetic effect was observed in animal studies with Navane; since this effect may also occur in man, it is possible that Navane (thiothixene) may mask signs of overdosage of toxic drugs and may obscure conditions such as intestinal obstruction and brain tumor.

In consideration of the known capability of Navane and certain other psychotropic drugs to precipitate convulsions, extreme caution should be used in patients with a history of convulsive disorders or those in a state of alcohol withdrawal since it may lower the convulsive threshold. Although Navane potentiates the actions of the barbiturates, the dosage of the anticonvulsant therapy should not be reduced when Navane is administered concurrently.

Caution as well as careful adjustment of the dosage is indicated when Navane is used in conjunction with other CNS depressants other than anticonvulsant drugs.

Though exhibiting rather weak anticholinergic properties, Navane should be used with caution in patients who are known or suspected to have glaucoma, or who might be exposed to extreme heat, or who are receiving atropine or related drugs.

Use with caution in patients with cardiovascular disease.

Also, careful observation should be made for pigmentary retinopathy and lenticular pigmentation (fine lenticular pigmentation has been noted in a small number of patients treated with Navane [thiothixene] for prolonged periods). Blood dyscrasias (agranulocytosis, pancytopenia, thrombocytopenic purpura), and liver damage (jaundice, biliary stasis), have been reported with related drugs.

Undue exposure to sunlight should be avoided. Photosensitive reactions have been reported in patients on Navane.

Intramuscular Administration – As with all intramuscular preparations, Navane (thiothixene hydrochloride) Intramuscular should be injected well within the body of a relatively large muscle. The preferred sites are the upper outer quadrant of the buttock (i.e., gluteus maximus) and the mid-lateral thigh.

The deltoid area should be used only if well developed such as in certain adults and older children, and then only with caution to avoid radial nerve injury. Intramuscular injections should not be made into the lower- and mid-thirds of the upper arm. As with all intramuscular injections, aspiration is necessary to help avoid inadvertent injection into a blood vessel.

Adverse Reactions. *Note:* Not all of the following reactions have been reported with Navane. However, since Navane has certain chemical and pharmacologic similarities to the phenothiazines, all of the known side effects and toxicity associated with phenothiazine therapy should be borne in mind when Navane (thiothixene) is used.

Cardiovascular effects: Tachycardia, hypotension, lightheadedness and syncope. In the event hypotension occurs, epinephrine should not be used as a pressor agent since a paradoxical further lowering of blood pressure may result. Nonspecific EKG changes have been observed in some patients receiving Navane. These changes are usually reversible and frequently disappear on continued Navane therapy. The clinical significance of these changes is not known.

CNS effects: Drowsiness, usually mild, may occur, although it usually subsides with continuation of Navane therapy. The incidence of sedation appears to be similar to that of the piperazine group of phenothiazines, but less than that of certain aliphatic phenothiazines. Restlessness, agitation and insomnia have been noted with Navane. Seizures and paradoxical exacerbation of psychotic symptoms have occurred with Navane infrequently.

Hyperreflexia has been reported in infants delivered from mothers having received structurally related drugs.

In addition, phenothiazine derivatives have been associated with cerebral edema and cerebrospinal fluid abnormalities.

Extrapyramidal symptoms, such as pseudoparkinsonism, akathisia, and dystonia have been reported. Management of these extrapyramidal symptoms depends upon the type and severity. Rapid relief of acute symptoms may require the use of an injectable antiparkinson agent. More slowly emerging symptoms may be managed by reducing the dosage of Navane and/or administering an oral antiparkinson agent.

Persistent Tardive Dyskinesia: Although not reported with Navane, certain antipsychotic agents have been associated with persistent dyskinesias. Tardive dyskinesia may appear in some patients on long term therapy or may occur after drug therapy has been discontinued. The risk seems to be greater in elderly patients on high dose therapy, especially females. The symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movements of the tongue, face, mouth or jaw (e.g., protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Sometimes these may be accompanied by involuntary movements of extremities.

There is no known effective treatment for tardive dyskinesia; antiparkinsonism agents usually do not alleviate the symptoms of this syndrome. It is suggested that all antipsychotic agents be discontinued if these symptoms appear.

Should it be necessary to reinstitute treatment, or increase the dosage of the agent, or switch to a different antipsychotic agent, the syndrome may be masked.

It has been reported that fine vermicular movements of the tongue may be an early sign of the syndrome and if the medication is stopped at that time, the syndrome may not develop.

Hepatic effects: Elevations of serum transaminase and alkaline phosphatase, usually transient, have been infrequently observed in some patients. No clinically confirmed cases of jaundice attributable to Navane (thiothixene) have been reported.

Hematologic effects: As is true with certain other psychotropic drugs, leukopenia and leucocytosis, which are usually transient, can occur occasionally with Navane. Other antipsychotic drugs have been associated with agranulocytosis, eosinophilia, hemolytic anemia, thrombocytopenia and pancytopenia.

Allergic reactions: Rash, pruritus, urticaria, photosensitivity and rare cases of anaphylaxis have been reported with Navane. Although not experienced with Navane, exfoliative dermatitis and contact dermatitis (in nursing personnel) have been reported with certain phenothiazines.

Endocrine disorders: Lactation, moderate breast enlargement and amenorrhea have occurred in a small percentage of females receiving Navane. If persistent, this may necessitate a reduction in dosage or the discontinuation of therapy. Phenothiazines have been associated with false positive pregnancy tests, gynecomastia, hypoglycemia, hyperglycemia, and glycosuria.

Autonomic effects: Dry mouth, blurred vision, nasal congestion, constipation, increased sweating, increased salivation, and impotence have occurred infrequently with Navane therapy. Phenothiazines have been associated with miosis, mydriasis, and adynamic ileus.

Other adverse reactions: Hyperpyrexia, anorexia, nausea, vomiting, diarrhea, increase in appetite and weight, weakness or fatigue, polydipsia and peripheral edema.

NOTE: Sudden deaths have occasionally been reported in patients who have received certain phenothiazine derivatives. In some cases the cause of death was apparently cardiac arrest or asphyxia due to failure of the cough reflex. In others, the cause could not be determined nor could it be established that death was due to phenothiazine administration because safe conditions for its use have not been established.

Dosage and Administration. Dosage of Navane should be individually adjusted depending on the chronicity and severity of the condition. In general, small doses should be used initially and gradually increased to the optimal effective level, based on patient response.

Usage in children under 12 years of age is not recommended.

Navane Intramuscular Solution—For Intramuscular Use Only. Where more rapid control and treatment of behavior is desirable, the intramuscular form of Navane (thiothixene hydrochloride) may be indicated. It is also of benefit where the very nature of the patient's symptomatology, whether acute or chronic, renders oral administration impractical or even impossible.

For treatment of acute symptomatology or in patients unable or unwilling to take oral medication, the usual dose is 4 mg. of Navane Intramuscular administered 2 to 4 times daily. Dosage may be increased or decreased depending on response. Most patients are controlled on a total daily dosage of 16 to 20 mg. The maximum recommended dosage is 30 mg./day. An oral form should supplant the injectable form as soon as possible. It may be necessary to adjust the dosage when changing from the intramuscular to oral dosage forms. Dosage recommendations for Navane Capsules and Concentrate appear in the following paragraphs.

Navane Capsules; Navane Concentrate—In milder conditions, an initial dose of 2 mg. three times daily. If indicated, a subsequent increase to 15 mg./day total daily dose is often effective.

In more severe conditions, an initial dose of 5 mg. twice daily.

The usual optimal dose is 20 to 30 mg. daily. If indicated, an increase to 60 mg./day total daily dose is often effective. Exceeding a total daily dose of 60 mg. rarely increases the beneficial response.

Some patients have been successfully maintained on once-a-day Navane (thiothixene) therapy.

Overdosage. Manifestations include muscular twitching, drowsiness, and dizziness. Symptoms of gross overdosage may include CNS depression, rigidity, weakness, torticollis, tremor, salivation, dysphagia, hypotension, disturbances of gait, or coma.

Treatment: Essentially symptomatic and supportive. For Navane oral, early gastric lavage is helpful. For Navane oral and intramuscular, keep patient under careful observation and maintain an open airway, since involvement of the extrapyramidal system may produce dysphagia and respiratory difficulty in severe overdosage. If hypotension occurs, the standard measures for managing circulatory shock should be used (I.V. fluids and/or vasoconstrictors).

If a vasoconstrictor is needed, levarterenol and phenylephrine are the most suitable drugs. Other pressor agents, including epinephrine, are not recommended, since phenothiazine derivatives may reverse the usual pressor action of these agents and cause further lowering of blood pressure.

If CNS depression is present, recommended stimulants include amphetamine, dextroamphetamine, or caffeine and sodium benzoate. Picrotoxin or pentylenetetrazol should be avoided. Extrapyramidal symptoms may be treated with antiparkinson drugs.

There are no data on the use of peritoneal or hemodialysis, but they are known to be of little value in phenothiazine intoxication.

How Supplied. Navane (thiothixene) is available as capsules containing 1 mg., 2 mg., 5 mg., and 10 mg. in bottles of 100 and 1,000.

Navane (thiothixene hydrochloride) Concentrate is available in 120 cc. (4 oz.) bottles with an accompanying dropper calibrated at 2 mg., 4 mg., 5 mg., 6 mg., 8 mg. and 10 mg. Each cc. contains thiothixene hydrochloride equivalent to 5 mg. of thiothixene. Contains alcohol, U.S.P. 7.0% v/v. (small loss unavoidable).

Navane (thiothixene hydrochloride) Intramuscular Solution is available in a 2 cc. amber glass vial in packages of 10. Each cc. contains thiothixene hydrochloride equivalent to 2 mg. of thiothixene, dextrose 5% w/v, benzyl alcohol 0.9% w/v.

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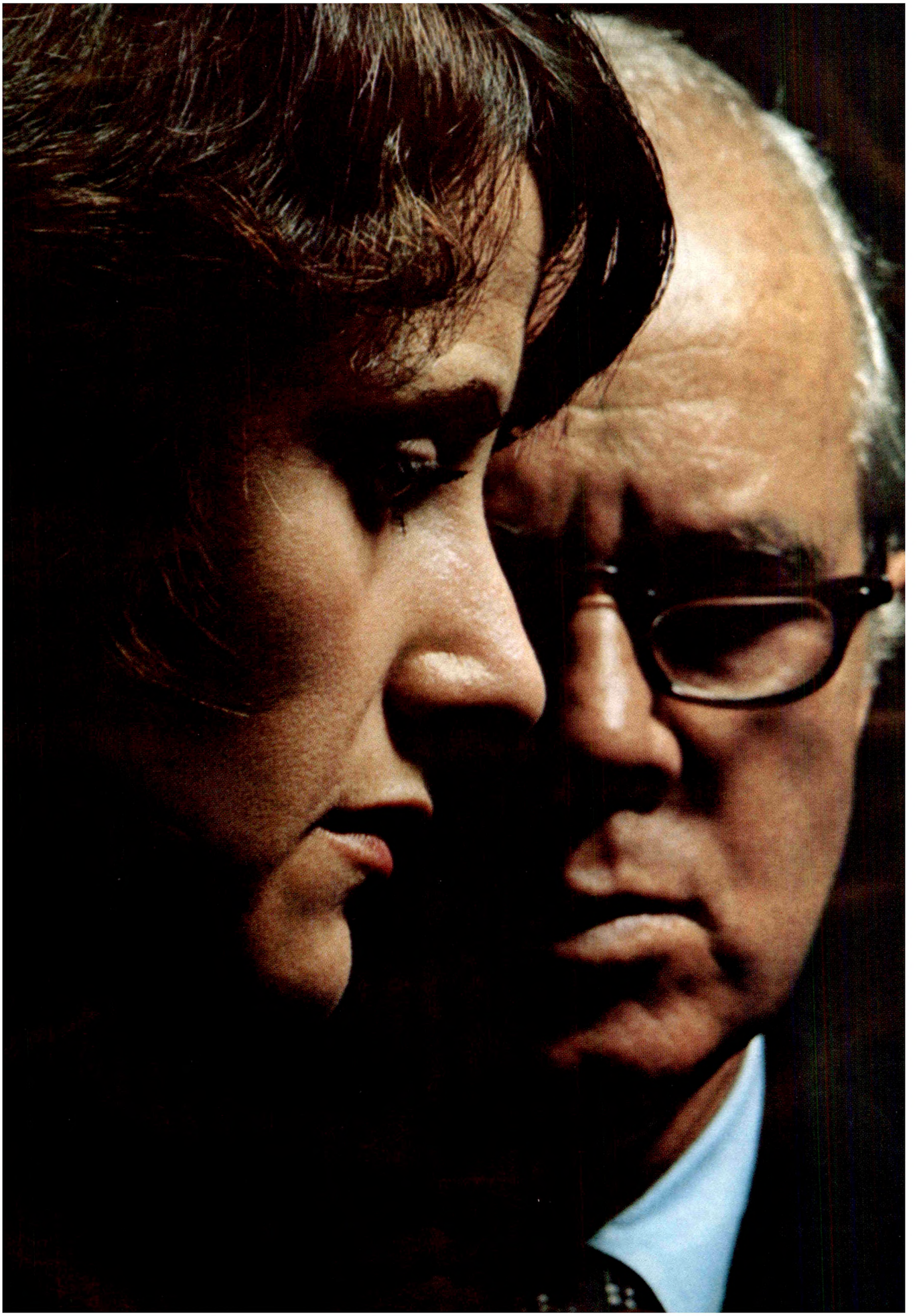
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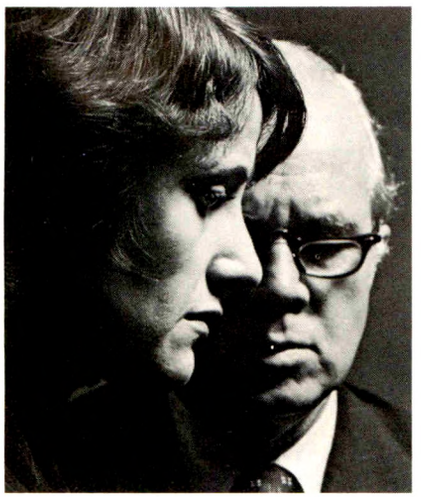
For a brief summary of prescribing information, please turn to the following page.

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CONTRAINDICATIONS: Central nervous system depression from drugs (barbiturates, narcotics, analgesics, antihistamines) and alcohol; bone marrow depression; pregnancy; known hypersensitivity to phenothiazines or amitriptyline. Do not give concomitantly with MAOI drugs because hyperpyretic crises, severe convulsions, and deaths have occurred from such combinations. Allow minimum of 14 days between therapies, then initiate therapy with TRIAVIL cautiously, with gradual increase in dosage until optimum response is achieved. Not recommended for use during acute recovery phase following myocardial infarction. Not recommended in children.

WARNINGS: TRIAVIL should not be given with guanethidine or similarly acting compounds. Use cautiously in patients with history of urinary retention, narrow-angle glaucoma, increased ocular pressure, or convulsive disorders. Patients with cardiovascular disorders should be watched closely. Tricyclic antidepressants, including amitriptyline HCl, particularly in high doses, have been reported to produce arrhythmias, sinus tachycardia, and prolongation of conduction time. Myocardial infarction and stroke have been reported with tricyclic antidepressant drugs. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. Caution patients performing hazardous tasks, such as operating machinery or driving motor vehicles, that drug may impair mental and/or physical abilities.

PRECAUTIONS: Suicide is a possibility in depressed patients and may remain until significant remission occurs. Such patients should not have access to large quantities of this drug.
Perphenazine: Should not be used indiscriminately. Use with caution in patients who have previously exhibited severe adverse reactions to other phenothiazines. Likelihood of untoward actions is greater with high doses. Closely supervise with any dosage.
The antiemetic effect of perphenazine may obscure signs of toxicity due to overdosage of other drugs or make more difficult the diagnosis of disorders such as brain tumor or intestinal obstruction.
A significant, not otherwise explained, rise in body temperature may suggest individual intolerance to perphenazine, in which case discontinue.
If hypotension develops, epinephrine should not be employed, as its action is blocked and partially reversed by perphenazine.
Phenothiazines may potentiate the action of central nervous system depressants (opiates, analgesics, antihistamines, barbiturates, alcohol) and atropine. In concurrent therapy with any of these, TRIAVIL should be given in reduced dosage. May also potentiate the action of heat and phosphorous insecticides.
Amitriptyline: In manic-depressive psychosis, depressed patients may experience a shift toward the manic phase if they are treated with an antidepressant drug. Patients with paranoid symptomatology may have an exaggeration of such symptoms. The tranquilizing effect of TRIAVIL has seemed to reduce the likelihood of this effect.
Supervise closely and carefully adjust dosage when given with anticholinergic agents and sympathomimetic drugs.
The drug may enhance the response to alcohol and the effects of barbiturates and other CNS depressants.
Concurrent administration of amitriptyline HCl and electroshock therapy may increase the hazards of therapy. Such treatment should be limited to patients for whom it is essential.
Discontinue several days before elective surgery if possible.
Elevation and lowering of blood sugar levels have both been reported.

ADVERSE REACTIONS: Similar to those reported with either constituent alone.
Perphenazine: Side effects may be any of those reported with phenothiazine drugs: extrapyramidal symptoms (opisthotonos, oculogyric crises, hyperreflexia, dystonia, akathisia, dyskinesia, parkinsonism) usually controlled by the concomitant use of effective antiparkinsonian drugs and/or by reduction in dosage, but sometimes persist after discontinuation of the phenothiazine; skin disorders (photosensitivity, itching, erythema, urticaria, eczema, up to exfoliative dermatitis); other allergic reactions (asthma, laryngeal edema, angioneurotic edema, anaphylactoid reaction); peripheral edema; reversed epinephrine effect; hyperglycemia; endocrine disturbances (lactation, galac-

torrhea, disturbances of menstrual cycle); altered cerebrospinal fluid proteins; paradoxical excitement; ECG abnormalities (quinidine-like effect); reactivation of psychotic processes; catatonic-like states; autonomic reactions, such as dryness of the mouth, headache, nausea, vomiting, constipation, obstipation, urinary frequency, blurred vision, nasal congestion; and a change in pulse rate; hypnotic effects; pigmentary retinopathy; corneal and lenticular pigmentation; occasional lassitude; muscle weakness; mild insomnia. Other adverse reactions reported with various phenothiazine compounds include blood dyscrasias (pancytopenia, thrombocytopenic purpura, leukopenia, agranulocytosis, eosinophilia); liver damage (jaundice, biliary stasis); grand mal convulsions; cerebral edema; polyphagia; photophobia; skin pigmentation; and failure of ejaculation.

Amitriptyline: Note: Listing includes a few reactions not reported for this drug, but which have occurred with other pharmacologically similar tricyclic antidepressant drugs. *Cardiovascular:* Hypotension; hypertension; tachycardia; palpitation; myocardial infarction; arrhythmias; heart block; stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus. *Anticholinergic:* Dry mouth; blurred vision; disturbance of accommodation; constipation; paralytic ileus; urinary retention; dilatation of urinary tract. *Allergic:* Skin rash; urticaria; photosensitivity; edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis; eosinophilia; purpura; thrombocytopenia. *Gastrointestinal:* Nausea; epigastric distress; vomiting; anorexia; stomatitis; peculiar taste; diarrhea; parotid swelling; black tongue. *Endocrine:* Testicular swelling and gynecomastia in the male; breast enlargement and galactorrhea in the female; increased or decreased libido; elevated or lowered blood sugar levels. *Other:* Dizziness; weakness; fatigue; headache; weight gain or loss; increased perspiration; urinary frequency; mydriasis; drowsiness; jaundice; alopecia. *Withdrawal Symptoms:* Abrupt cessation after prolonged administration may produce nausea, headache, and malaise. These are not indicative of addiction.

For more detailed information, consult your MSD Representative or see full Prescribing Information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486.

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Addendum

A suggested four-point rating scale to help evaluate patient progress week-to-week or month-to-month when presenting symptoms include anxiety or agitation with depression.

Mood—degree of depression (facial expression, voice quality, conversation content).

1. Continued profound depression, feelings of hopelessness.
2. Feeling "blue," chronic pessimism, rare cheerfulness.
3. Appropriate cheerfulness, slight depression, diluted pleasure capacity.
4. Appropriate cheerfulness and optimism.

Psychomotor Activity—reflective of emotional pressure (hypoactive patient).

1. Immobile, not fulfilling daily responsibilities.
2. Generalized slowness, constant fatigue.
3. Appropriate motor activity in most instances.
4. Activity appropriate in degree and duration to environmental stimuli.

Performance — vocational.

1. Unable to perform at all.
2. Works intermittently with difficulty.
3. Full-time employment, moderate pride in achievements.
4. Full-time employment, functioning efficiently, deriving pleasure from achievements.

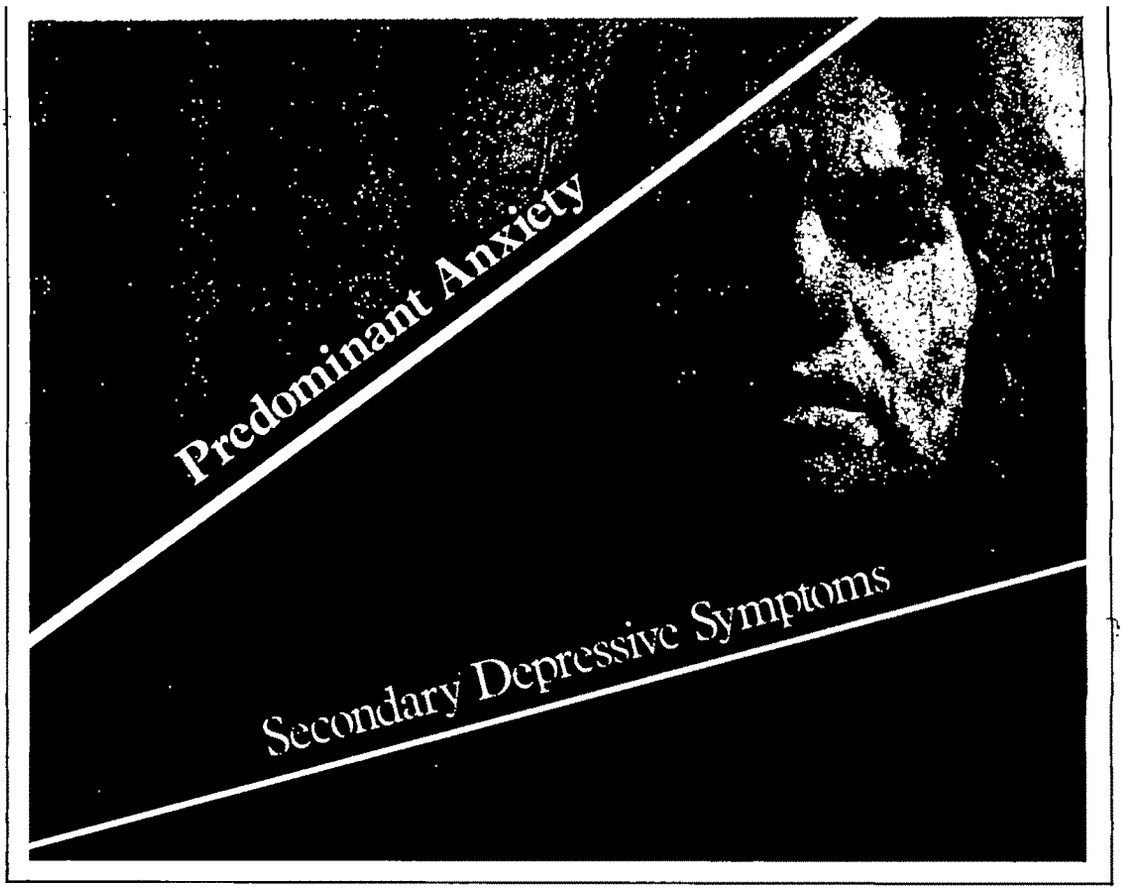
Anxiety Amelioration — in terms of motor, affective, autonomic and verbal phenomenon.

1. Panic, incessant movement, state of terror.
2. Moderate restlessness, pacing, moderate expression of fear.
3. Slight restlessness, slight affective expression of fear.
4. Calm, no restlessness, expression of fear (when it occurs) appropriate to severity of stress.

Amelioration of Symptoms

1. Symptoms unchanged or worse.
2. Fair, slight improvement, patient still plagued with symptoms.
3. Symptoms markedly reduced in intensity and frequency, able to cope.
4. All presenting symptoms gone.

Adapted from Lesse, S.: Anxiety, Its Components, Development and Treatment, Grune & Stratton, New York, 1970.



This psychoneurotic often responds

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

When you determine that the depressive symptoms are associated with or secondary to predominant anxiety in the psychoneurotic patient, consider Valium (diazepam) in addition to reassurance and counseling, for the psychotherapeutic support it provides. As anxiety is relieved, the depressive symptoms referable to it are also often relieved or reduced.

The beneficial effect of Valium is usually pronounced and rapid. Improvement generally becomes evident within a few days, although some patients may require a longer period. Moreover, Valium (diazepam) is generally well tolerated. Side effects most commonly reported are drowsiness, ataxia and fatigue. Caution your patients against engaging in hazardous occupations or driving.

Frequently, the patient's symptoms are greatly intensified at bedtime. In such situations, Valium offers an additional advantage: adding an *h.s.* dose to the *b.i.d.* or *t.i.d.* schedule can relieve the anxiety and thus may encourage a more restful night's sleep.

symptom complex to Valium® (diazepam)

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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Valium® 2-mg, 5-mg, 10-mg tablets
(diazepam)

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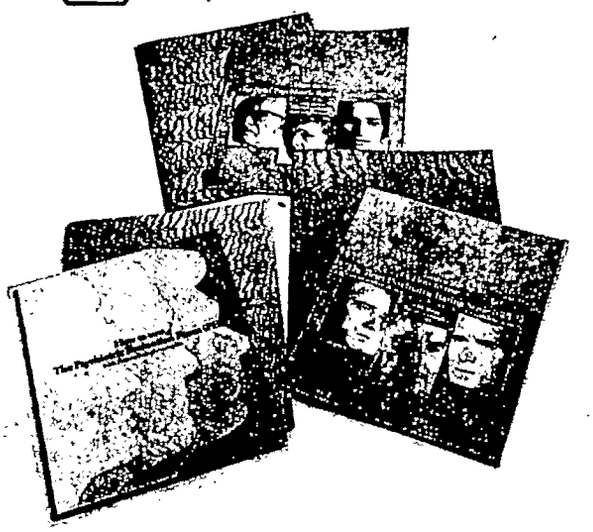
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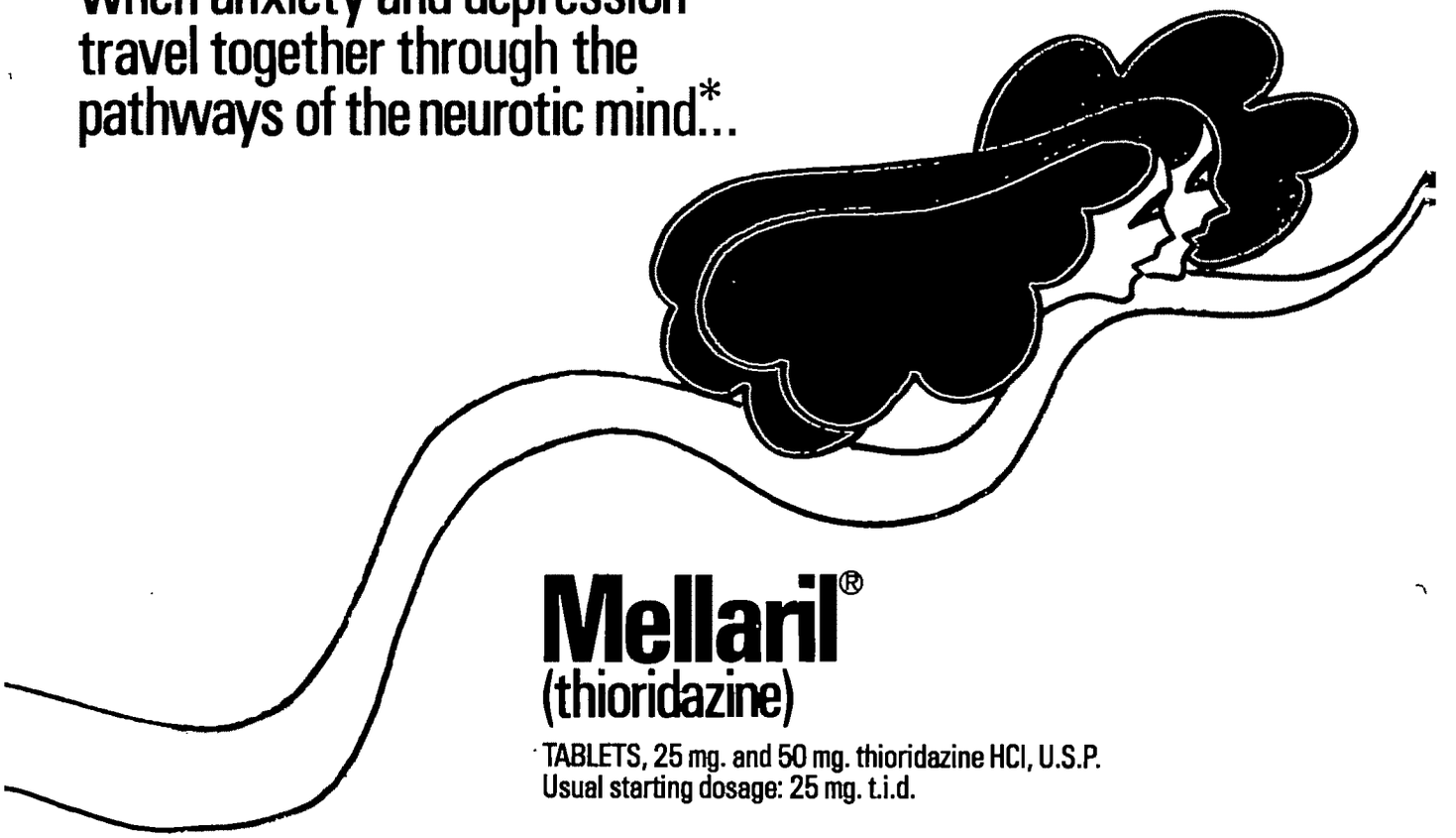
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when anxiety and depression travel together through the pathways of the neurotic mind*...



Mellaril®
(thioridazine)

TABLETS, 25 mg. and 50 mg. thioridazine HCl, U.S.P.
Usual starting dosage: 25 mg. t.i.d.

*Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified this indication as "probably" effective.
Final classification of the less-than-effective indications requires further investigation.

Before prescribing or administering, see Sandoz literature for full product information. The following is a brief summary.

Contraindications: Severe central nervous system depression, comatose states from any cause, hypertensive or hypotensive heart disease of extreme degree.

Warnings: Administer cautiously to patients who have previously exhibited a hypersensitivity reaction (e.g., blood dyscrasias, jaundice) to phenothiazines. Phenothiazines are capable of potentiating central nervous system depressants (e.g., anesthetics, opiates, alcohol, etc.) as well as atropine and phosphorus insecticides. During pregnancy, administer only when the potential benefits exceed the possible risks to mother and fetus.

Precautions: There have been infrequent reports of leukopenia and/or agranulocytosis and convulsive seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmentary retinopathy may be avoided by remaining within the recommended limits of dosage. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., driving), and increase dosage gradually. Orthostatic hypotension is more common in females than in males. Do not use epinephrine in treating drug-induced hypotension since phenothiazines may induce a reversed epinephrine effect on occasion. Daily doses in excess of 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: ***Central Nervous System***—Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. ***Autonomic Nervous System***—Dryness of mouth, blurred vision, constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. ***Endocrine System***—Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. ***Skin***—Dermatitis and skin eruptions of the urticarial type, photosensitivity. ***Cardiovascular System***—ECG changes (see ***Cardiovascular Effects*** below). ***Other***—A single case described as parotid swelling.
The following reactions have occurred with phenothiazines and should be considered: ***Autonomic Reactions***—Miosis, obstipation, anorexia, paralytic ileus. ***Cutaneous Reactions***—Erythema, exfoliative dermatitis, contact dermatitis. ***Blood Dyscrasias***—Agranulocytosis, leukopenia, eosinophilia, thrombocytopenia, anemia, aplastic anemia, pancytopenia. ***Allergic Reactions***—Fever, laryngeal edema, angioneurotic edema, asthma. ***Hepatotoxicity***—Jaundice, biliary stasis. ***Cardiovascular Effects***—Changes in terminal portion of electrocardiogram, including prolongation of Q-T interval, lowering and inversion of T-wave, and appearance of a wave tentatively identified as a bifid T or a U wave have been observed with phenothiazines, including Mellaril (thioridazine); these appear to be reversible and due to altered repolarization, not myocardial damage. While there is no evidence of a causal relationship between these changes and significant disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients showing characteristic electrocardiographic changes while taking the drug. While proposed, periodic electrocardiograms are not regarded as predictive. Hypotension, rarely resulting in cardiac arrest. ***Extrapyramidal Symptoms***—Akathisia, agitation, motor restlessness, dystonic reactions, trismus, torticollis, opisthotonus, oculogyric crises, tremor, muscular rigidity, and akinesia, occasionally persisting for several months or years especially in elderly patients with brain damage. ***Endocrine Disturbances***—Menstrual irregularities, altered libido, gynecomastia, weight gain, false positive pregnancy tests. ***Urinary Disturbances***—Retention, incontinence. ***Others***—Hyperpyrexia; behavioral effects suggestive of a paradoxical reaction, including excitement, bizarre dreams, aggravation of psychoses and toxic confusional states; following long-term treatment, a peculiar skin-eye syndrome marked by progressive pigmentation of skin or conjunctiva and/or accompanied by discoloration of exposed sclera and cornea; stellate or irregular opacities of anterior lens and cornea.

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THE AMERICAN JOURNAL OF PSYCHIATRY

Overview: The Impact of New Advances in Sex Research on Psychoanalytic Theory

BY ROBERT J. STOLLER, M.D.

This overview describes five concepts of sexuality that run through Freud's writings—bisexuality, infantile sexuality and the Oedipus complex, libido theory, the primacy of the penis, and conflict—and tests each against recent advances in sex research.

PSYCHOANALYTIC THEORY is Freud's creation; most modifications introduced by others have not only been minor but are elaborations of theoretical positions he had already explicitly introduced. It is therefore understandable if this presentation examines the sexual theories of Freud alone. This permitted, I need only add that, while one cannot usually discuss any sector of his work without remembering how it changed as the years passed, this is less true for his sexual theories.

I would like to focus my discussion almost completely on the two areas of behavior for which the term "sexual" is commonly used: the search, originating in the drive toward reproduction, for erotic pleasure and the development and maintenance of masculinity and femininity. This overview is based on five concepts of sexuality that run through Freud's writings from almost the beginning of his great work—before and after 1900—to his death and will test each against recent advances in sex research. The five concepts are bisexuality, infantile sexuality and the Oedipus complex, libido theory, the primacy of the penis, and conflict. While each is interwoven with the others in making up his coherent theory of sexuality, I will separate them for ease of discussion. In doing so, I will emphasize the "impact" more than detailing the "new advances."

This paper was written at the invitation of the Editor; it is largely based on a paper read at the Auken Conference, Copenhagen, Denmark, May 4, 1972.

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CONSTITUTIONAL BISEXUALITY

Freud felt there is a biological substrate—the "bedrock" (1)—of bisexuality,[1] upon which all later psychological development is anchored. Where are we nowadays with this concept that there is a biological bisexuality, and where are we with the related idea that such a "force" is an essential effector of human behavior, normal and pathological? I think most of us today believe in something like Freud's biological bisexuality (now more stylishly called "sexual bipotentiality" or "sexual dimorphism"); we know that cells, tissues, and organs in each sex can be modified in the direction of the opposite sex. Most of us, however, would not look on these findings as quite indicating bisexuality as Freud understood the term.

Especially following Jost's embryological work (most recently reviewed in Jost [2]), the evidence has piled up that, in mammalian species at least, the "resting state" is on the female side and that to make tissues, organs, or organisms male requires an androgen pulse (apparently initiated by the Y chromosome) for the development of each of those anatomical and physiological criteria whose algebraic sum we call maleness. Even, and especially, the brain requires such masculinization in mammals, or else masculine behavior will not result.

Our expectation that we shall find that humans share in the general rule of the femaleness of mammalian tissue seems borne out when we look at the "natural experiments" of endocrine disorders. There we see in each instance that the fetus that is deprived of androgen at critical times in its development fails to show anatomic maleness, regardless of chromosomal sex. The XO

[1] Freud used "bisexuality" in several ways, ignoring distinctions in order to arrive at the highest level of abstraction. Thus we are often uncertain whether he means a prime principle of all living cells, a state of anatomical affairs in the embryo, anal pleasure in the child, friendship between people of the same sex, overt homosexuality, or a universal attribute of human sexuality. He felt they are all aspects of the same concept; I do not.

(Turner's syndrome) infant, whatever her defects, has no male tissues, for she had no gonad to produce androgen and, in the androgen insensitivity syndrome, the inability of target tissues to respond to circulating androgens restrains fetal development to femaleness. On the other hand, the female fetus that is exposed to increased androgen, as in hyperadrenalism, is masculinized and, in the extreme case, the clitoris is anatomically indistinguishable from a penis.

But none of this touches on psychoanalytic theories of behavior per se, except to indicate, as Freud had already been taught, that the male organism's tissues can be as if female, and vice versa for females. Freud's interest as a psychologist was not, however, in these anatomic matters but in the mind-body problem: How do these physiological matters affect behavior? Here we are especially indebted to Money, whose studies on people with such endocrine disorders as those mentioned above suggest that the fetal human brain also needs to be "primed" with androgen for normal masculine development and that, if the female fetal brain is exposed to androgens, a mild though measurable increase in masculine behavior in the growing girl can be expected (3). Other studies suggest that an unusual number of males with congenital hypogonadism, and thus presumably inadequate fetal androgen (for example, as in Klinefelter's syndrome), are feminine from earliest childhood on, regardless of rearing (4, 5).

Recent reports have suggested that homosexuality in males is caused primarily by biological forces. Geneticists have argued that homosexuality is inherited (6, 7). One worker has described the instant cure of homosexuality by neurosurgery (coagulation of Cajal's nucleus in the ventromedial hypothalamus), indicating a precise brain center for the behavior (8, 9). Other studies have shown decreased plasma testosterone levels and impaired spermatogenesis (10) and an abnormal ratio of androsterone to etiocholanalone (11) in direct relation to the degree of homosexuality. None of these studies contradicts the others; they may be measuring different aspects of the same process: genes, neuroanatomy, or chemistry. And none necessarily contradicts psychoanalytic theory, if each is a piece of the underlying "bedrock" to which Freud referred. However, if the claim is made that these biological mechanisms are *the* cause of homosexuality, then of course Freud's theory of disturbed interpersonal relationships (oedipal and pre-oedipal conflict) is in doubt.

But as yet I do not believe these physiological studies, animal or human, explicate human sexual behavior; I think, rather, that they tell us only about underlying biological *potentialities*, as do so many other studies in regard to an aspect of human behavior. (An epileptic seizure tells us something about aggression and violence, as does a decorticated cat, but it does not tell all.) As usual, what is made of those potentialities usually lies in the area of environmental influences. For help in this regard, let us turn to the theories of interpersonal object relations and of social learning.

INFANTILE SEXUALITY AND THE OEDIPUS COMPLEX

Freud believed bisexuality (and all sexuality) arose from two sources: the first was biological (as we have already seen), a fixed part of human psychology, and the second was environmental. He said (12) what most of us believe: the importance of the biological or the environmental in determining sexual behavior varies from person to person and from time to time. While his great finding was the power of the environment ("the accidental factor"), his grandest theories were about biology. Feeling that all his psychoanalytic theories were ultimately biological, he did not adequately differentiate between biological philosophizing and the rigors of biological research. The former should be ignored (although, unfortunately, it has been the basis of the fiercest battles within psychoanalysis, e.g., the concept of psychic energy, life versus death instinct, libido theory, Lamarckian inheritance of past experiences of the human race), unless analysts are also willing to do the scientific work necessary to defend these theories.

In fact, on putting aside Freud's "biologizing," we find his contributions, which now stand clear, perhaps even more formidable. One of the greatest of these has been his emphasis on infantile and childhood sexuality. He underlined the crucial importance of parent-child relationships (which I will look at shortly when discussing the Oedipus complex) as a cornerstone of his work almost from the start. What Freud undertook, as early as 1900 (13), was the most powerful and explanatory social learning theory of human development ever proposed.

Over the decades, his biological speculations have not been confirmed. His interpersonal theories and his observations of parent-child interactions, however, have been a rich source for innumerable researchers to the present (including, to their shame, many who refuse to acknowledge his gift to them), and many of their fundamentals have not been refuted.

Freud told us, as no one did before, that parents have the greatest possible influence on their children's development, that children create their psychic structure in response, that adult sexual life can be traced back to effects in infancy, and that sexual desire and gratification find their origins in infancy, long before the obvious upsurge of puberty. Exactly how parents transmit these influences to their children has been the subject of increasing study by analysts and nonanalysts for years. Freud's ideas spurred the researches of physiologists, behaviorists, ethologists, general systems theorists—innumerable workers who now believe infancy and childhood are crucial developmental phases.

Social learning theorists (as they are called in academic circles) or object relations theorists (as they are known among psychoanalysts) have, of course, great theoretical differences. These may obscure an overriding similarity: the belief that behavior can be radically modified purely by the effects of one person upon another. These workers also share the belief that the personality of the infant and small child, more than that of the adult, is

especially vulnerable to permanent behavior modification. Their major area of disagreement may be over the question of whether trauma, conflict, defense, and compromise formation as a resolution of conflict contribute fundamentally to personality formation.

We must here separate two different aspects of sexuality. The first is that concerned with genital pleasure, which is more or less tied to reproductive behavior or its avoidance, and the other is gender behavior, which is related to masculinity and femininity. Here again I wish to emphasize the danger of extrapolating from animal to human behavior, even if such caution is currently unstylish. Of all the areas of behavior in which there is discontinuity between animals, even primates, and man, the greatest is in motivated behavior. The evolutionary rule is not only that certain fundamental behaviors persist, tied to neuroanatomic structures and circuits that are constant across species, but also that the higher one goes in the evolutionary scale, the greater the amount of choice available to the organism.

The brain substrates of what we call "choice" or "freedom" simply do not exist in any other creature as they do in man. No one seriously argues about whether man has a greater potential for variability of behavior than any other animal or whether man's behavior, even in its neurophysiological roots, requires more priming (organization) by environment than that of any other animal. For instance, we can search the evolutionary scale forever to find the biological roots for aggression but from that source we cannot determine why man is the only species that murders his own kind. Perhaps some day we shall find a thalamic focus for penile erections in man as in monkeys (14); that sort of behavior—the fundament—obeys evolutionary rules. But there is an entirely separate level of behavior that is much more complicated, though the final action is simple and physiological—say, erection. The input leading to this latter behavior is not only thalamic or hypothalamic but goes through the unknown neurophysiology that is the result of previous experience fixed in memory and modified by fantasy (especially unconscious fantasy). It is unique to man. Man remembers differently from other animals: *he symbolizes and he fantasies*, and in that way he not only remakes the past but invents the future he anticipates.

In closer relation to our subject, the evolutionary perspective has failed to teach us much about human sexual desires, object choices, or pathology. For instance, the perversions—habitual, driving needs for aberrant genital satisfaction—are not found in free-ranging members of lower species, but they are ubiquitous in man. The puny attempts to demonstrate perversion in lower animals (e.g., the cows that mount other cows are homosexuals) are not edifying.

Similarly, studies that reveal the types of distortions of behavior that can be permanently built into animals by experiments (e.g., conditioning, imprinting, or implanting electrodes in discrete brain structures) tell us about potentialities but do not give us answers about free-ranging behavior in man; the data only show us more questions we should ask. In other words, these findings in animals confirm nothing in humans; they only suggest. However, it is important for analysts to recognize that, when theory building, they ignore such suggestions at their peril.

Parent-Child Relationships

For Freud, sexual development depends strongly on relationships between parents and their children—the Oedipus complex. Let me forego an adequate review of this hypothesis as it relates to masculinity and femininity and recall only that Freud said boys have two great advantages over girls: a boy's first love is heterosexual because his first love object (mother) is female and, secondly, he has a superior phallus. His masculine development is threatened mainly by the fear that his desire for his mother will anger his too-powerful father; excessive fear may damage his masculinity. On the other hand, the girl, in her attachment to her mother, starts life with a homosexual relationship, and only on relinquishing it and her belief that she will have a penis will she become feminine and turn to her father.

Because Freud saw this process as more conflict-laden and devious in girls, he felt he had an explanation for his conviction that adult female sexuality is less certain, less gratifying, and more mysterious than that of males. A curious addition to his theory was his belief that the development of little boys and little girls is about the same [2] until the onset of the full-blown development of the oedipal situation (at about age five or six) and that therefore no significant, true femininity is present in little girls before this age.

Some workers (e.g., Malinowsky [16]) have claimed the Oedipus complex is imaginary because its form is different in some societies, e.g., the genetic father's place as the psychological father is taken by one of the mother's kin. But so far, there are no descriptions of cultures in which the growing child is not looking upward toward a large and powerful male who serves as a model for masculinity for boys and a model heterosexual object for girls, or toward a female who mothers. What varies from family to family and culture to culture is how much conflict there is in the complex, but not whether families are made up of mothers, fathers, and children, each with attributes of power and sex more or less as Freud noted in Vienna.

Where is this theory of the development of masculinity and femininity at present? A new factor has been thrown into the discussion by studies on the earliest stages of gender development, which contradict Freud in several places. It was found that certain boys, because of an oddity in child-rearing practices, were markedly feminine from their earliest days on. They were found to have spent excessive time in intense, blissful intimacy with their mothers, and the mothers who are more likely to create this type of situation are drawn to marry distant

[2] Freud wrote: "Both sexes seem to pass through the early phases of libidinal development in the same manner. . . . With their entering into the phallic phase the differences between the sexes are completely eclipsed by their agreement. We are obliged now to recognize that the little girl is a little man" (15, pp. 117–118).

and passive men. In general, the purer the form this constellation takes in a family, the earlier and the more ingrained and irreversible is the femininity that develops in the boy (17). On the other hand, boys who have close relationships with their fathers are found not to have mothers like this, and the boys are masculine (18).

A girl who has a distant, unloving mother but whose father is close to her develops masculinity if the father encourages her to have the same interests he does (19). A girl whose mother enjoys having a daughter and is not ashamed her daughter has a female body, and whose father encourages his daughter's femininity, will grow up feminine (20).

Whether the communications between each parent and the infant mold the child's behavior by imprinting, classical or operant conditioning, identification, or combinations of all these is still to be thrashed out. What is demonstrated in study after study, however, is that the attitudes communicated from parent to infant are powerfully instrumental in creating masculinity and femininity in both sexes. This reduces the conflict (castration anxiety) aspect of gender development; unlike Freud's theory, conflict-free development plays a prominent part in this description.

A greater disagreement with classical analytic theory arises from the above. While it is obvious enough that the boy's first love object is a female (his mother), in his earliest stages of life a great physical and emotional intimacy (merging) between him and his mother's body and psyche introduces the risk of identification with a female.[3] And so, one of the boy's first tasks on the way to masculinity is to separate himself from his mother (21); that process can be subverted by a too-loving mother. The same intimacy does not thus endanger the little girl, for such closeness with the mother only encourages her femininity.

New data are appearing in regard to the differential handling of male and female infants by their mothers (22); in the usual case (which is more likely to produce femininity in girls and masculinity in boys), girls have more contact, physical and visual, during the early months than boys (23). Mothers generally feel easier being intimate with their infant girls than with boys. Therefore the boy does not have the straightforward heterosexual development Freud alleged. Instead, he has a major impediment on the way to heterosexuality; he must rid himself of whatever femininity may develop in the mother-infant symbiosis. Only then, at a later stage, can he see his mother as the separate and desirable object of the classical oedipal situation (24).

And so, rather than girls being little boys, the above would predict that little girls are shaped in the direction of femininity right from the start. And that is what simple observation reveals: girls in general just are not masculine in early childhood. Clear-cut femininity is routinely seen by a year or so of age; there is no evidence this is a facade or an imitation of femininity. How can I agree with this statement of Freud's: "As we all know, it is not until puberty that the sharp distinction is established between the masculine and feminine character" (12, p. 219)?

[3] "Identification" is used here with caution; as hinted above, the intimacy may influence the boy by less cognitive processes (e.g., imprinting) than "identification" connotes.

THE PRIMACY OF THE PENIS

Freud accepted as a given the belief that the superior sex is male. He felt this was a fact established throughout mammalia by males' physical superiority in strength: life-or-death struggles select males as superior because they are stronger. This fact, with the penis as its most compelling symbolic representation, was then reflected in mythology, folk tales, institutions of society, artistic productions, religious worship, dreams—everywhere.

In the family such power was granted to the father not only because custom demanded but because, from ancient times, it was his accepted responsibility to protect his family from physical danger and to provide food and at least minimal comforts, and because, as the strongest member of the family physically, he had life-and-death control over each member. This power, ultimately derived from the reality of physical strength, was institutionalized in society, from the ruler down into the family.

Freud, coming from a culture in which this authority still manifestly resided in fathers, did not have to question his principle that "anatomy is destiny." Any theory, however, in which this idea is an essential building block is weakened if the principle is incorrect.

Freud's enthusiasm for the position that men are superior fitted with what he considered observable fact: that women are secretive and insincere (12, p. 151); are more masochistic (15, p. 116), less self-sufficient (p. 117), more dependent and pliant (p. 117), and more envious and jealous (p. 125); have defective superegos (p. 129) and little sense of justice (p. 134); are more bisexual (p. 113), more narcissistic (p. 132), and weaker in social interests (p. 134); have less capacity for sublimating their instincts (p. 134); and are more rigid and unchangeable at an earlier age (pp. 134–135). They are intellectually inferior because they are biologically created for the nonintellectual task of motherhood; they are morally inferior because, lacking a penis, they cannot easily be threatened and because they are bound more concretely to the real world and so are less concerned with such aesthetic issues as morality (that is, they obey the command of biology rather than a more ethereal call).

It is a corollary of the thesis of male superiority that the prime feature of maleness, the penis, is a superior organ physically and symbolically; and Freud could point to phallic worship, in its myriad forms, for proof for those who do not listen to the dreams of men and women. In the concept of castration anxiety he found reason to believe that men considered the penis the prime organ of the race, and in penis envy, he found the proof that women also agreed on the primacy of the penis. Because it is visible, can change so in size, is shaped like a weapon, can penetrate, frightens women, and is such an intense

source of sensation from infancy on, it also demonstrates its superiority. Then, when it is contrasted with the female genitals, the case is again made. The female phallus, the clitoris, is much smaller, not visible, cannot penetrate, has not seized mankind's imagination, is never symbolized or exalted, and—Freud thought—is not a competent source of pleasure. Its significance is further weakened since it must share its fate with another organ, the vagina, which Freud felt was universally considered an inferior organ—it is hidden, dark, mysterious, uncertain, unclean, and an undependable source of pleasure.

That is a lot of evidence; wherever Freud looked in the outer world or in mental life, the primacy of the penis seemed proven.

Offered against Freud's argument is the exciting new research alluded to earlier. In mammalian species the function of cells is female in both sexes, until androgens are added in fetal life. In fact, except for the chromosomes, one cannot talk about two sexes until the androgens have been added; there is only femaleness. Freud, who always had a nose for mystery and who found so many of his mysteries at the most fundamental levels—cell function or even more primitive levels—would have been nonplussed by the above finding. And even more would he have been disturbed in his argument to learn that this female character of tissues extended into the central nervous system, where, as has now been demonstrated in mammals other than man, future masculine behavior in the male requires the organizing only androgens produce, while in the female nothing need be added for femininity. The new research would therefore seem to put Freud's argument in a most precarious position and, since he chose to extend his beliefs from the realm of psychodynamics into morality and other cosmic issues, in the last few years he has been well beaten about the head.

Nonetheless, we have not yet found in the new data a proof that mankind does not believe in the primacy of the penis; one can still ask where in the child's psyche this knowledge of embryology or tissue capability resides. It is not to be found. But we easily detect boys' and girls' attitudes about penises; they still find them impressive. Is this primacy? Some no longer think so but instead feel it is too bad Freud did not emphasize more strongly that children of both sexes are also deeply stirred by the significance of breasts and the womb; reproductive power is more difficult to represent visually, but, if measured by the mystery it creates, it is more important even than the penis.

In addition, the observations of Masters and Johnson (25) have had a great vogue in diminishing Freud's ideas about femininity. He said a girl is masculine until she gives up her hope for a penis; as long as she hopes, however, she retains her fixation on her clitoris, as if it were a penis. Only if she shifts her eroticism to the generative inner space, the vagina and pelvic organs, will she be feminine. But Masters and Johnson have found that all female orgasms originate in the clitoris [4]; they have not observed vaginal orgasms. So Freud's argument seems disproved.

And I believe it is—but not at all by Masters and Johnson's work. Innumerable women have sensed they have two sorts of orgasms—one clitoral, the other vaginal; they have no trouble distinguishing the two. Just because gross vaginal changes at the moment of orgasm are not visible to these observers does not prove the absence of vaginal orgasm. Perhaps its physiology—as in the case of intense pain or itch in muscle or skin—is only not *grossly* visible; or perhaps vaginal orgasm requires penile intercourse with a meaningful man and is not producible in a laboratory; or perhaps there is so much action in the vagina at the moment of an orgasm produced by penetration that the view is obscured. Their work has not disproved that there is an orgasm experienced deeper in the body than is a clitoral orgasm. So that argument does not dislodge Freud, but another does: too many feminine women have been known who do not have vaginal orgasms (26) and too many do who, by Freud's definition of maturity, cannot be feminine—schizophrenics, neurotics of all types and degree, and even grossly masculine women.

But this is a nonscientific discussion masked by pseudo-scientific rationalization (27, 28). How can one prove one sex is superior to the other if one does not first state the categories to be measured? If superiority is measured by body size, phallic dimensions, skill in football, fatherliness, or production of sperm, females are unequivocally inferior; the differences can be measured. Likewise, if superiority is measured by size of bosom, gestational capacity, longevity, resistance to illness, motheringness, or capacity to ovulate, women have the unquestioned edge. In the middle lie innumerable skills at which neither men nor women inherently excel, such as weaving, growing rice, solving problems in psychoanalytic research, running an advertising agency, or bickering. And then there are such imponderables as: Is a woman superior if she can have limitless orgasms or is a man superior if he is completely satisfied after one or five? This sort of foolishness, so intensely argued these days, proves nothing. Instead of pontificating about superiority, we might simply try to observe the development of males and females and masculinity and femininity. Let us relieve ourselves of the burden of deciding which is the better sex.

LIBIDO THEORY

Libido theory is part of Freud's generalized theory of instincts. It is not my purpose to review the development and changes of this theory, but it will be recalled that he started with the traditional division of self-preservative and species-preservative and ended with the more mysti-

[4] No one seems to remember that Freud also said: "When at last the sexual act is permitted [for the first time] and the clitoris itself becomes excited, it still retains a function: the task, namely, of transmitting the excitation to the adjacent female sexual parts, just as—to use a simile—pine shavings can be kindled in order to set a log of harder wood on fire" (12, p. 221).

cal life versus death instincts. I shall not concern myself here with the scientific and epistemological questions raised over the years about the concept of instinct (or drive); instead, I wish only to discuss libido theory, that description of the maturation of sexuality as a movement and elaboration through stages, each of which has its focus on a different part of the body. In addition to the theory of object relations embodied in his description of the Oedipus complex, Freud saw a development, governed by an inherited timing mechanism, in which in all humans "psychic energy" converges in a part of the body, "cathecting" it with "libido." (I do not have time—70 years was not enough—to discuss the pros and cons of the concept of "psychic energy," nor need we be concerned here that neither "cathexis" nor "libido" was ever defined in scientific terms.)

The inexorable progress of libidinal development starts with the oral phase, wherein the infant's life-preservative, affectionate, and sensual drives center in the mouth and its functions. Next is the anal phase, with its pleasures of expelling and retaining feces (and urine), and then the phallic phase in which boy and girl focus on their intense penile or clitoral sensations and note their anatomical differences. The final libidinal phase is genital maturity, consisting of loving and genitally gratifying heterosexual relations, reached only by those fortunate few who surmount the oedipal conflict. To this theory of libido, a conceptual groundwork for all human psychology, was added an important corollary—that different emotional disorders took their origin from two sorts of disturbances occurring at one of these libidinal phases: fixations resulting from excessive gratification during a particular phase or regression, due to anxiety, from a more advanced to an earlier phase. This special theory is mentioned now only because Freud based his theories of the production of perversions particularly on the libido theory's description of sexual advance from zone to zone.

As a description of human childhood development, Freud's observations on zonal phases have been confirmed and can be confirmed at any time with biologically normal children. However, no studies have been published that confirm the implications drawn from the observations. It has not yet been shown that any class of neurosis, including the perversions, or psychosis is caused by a disruption of the sensual experiences of the mouth, the defecatory or urinary systems, or the phallus (29, 30). (There is, however, a great deal of evidence that disturbed *object relations* during these phases cause psychopathology.) Libido theory as an explanation of neurotogenesis has been so far off base that it has never attracted serious attempts to test it by scientific methods.

An odd piece of libido theory is the notion that libido is a quantitative energy that flows or can be dammed and that the function of the "mental apparatus"[5] is to reduce the "instinctual tension"—unpleasure—that results from such damming. True, people usually get pleasure from tension reduction, as with sleeping, or after eating, intercourse, excreting, affect discharges, skin scratching, etc. But is that an effect of the postulated libido? Being a neurophysiological construct, libido can be challenged by a neurophysiological model. As it turns out, libido is as hard to seize as were the other "humours" of past eras. Rather, mammals (31), including man (32), have a precise center that produces the subjective experience called pleasure. Experimentally, it does not deplete as if drained. It can be turned on and off endlessly so that an animal can experience the same degree of intense pleasure even thousands of times an hour (31). The most parsimonious explanation of pleasure at present is not the hydraulic one of the flow of a substance or energy; the energic requirements of a switching mechanism in the central nervous system are infinitesimal.

CONFLICT

Two types of painful situations can influence personality development and thus sexual development, through severe impingements on the infant by events not felt as part of its psyche. These events may be unpleasant internal sensations (such as hunger, body pain, or respiratory distress) or external events (struggles against frustrating or traumatizing objects separate from one's body, intermittently by inanimate objects and persistently by important people, especially the mother at first). These are traumas (acute, chronic, or cumulative). Not all produce conflict; conflict implies intrapsychic struggle in order to *choose* among possibilities. Trauma may only cause reaction (change). For instance, early in infantile development a stimulus may produce change without conflict by an ethological process like imprinting, by classical conditioning, or by operant conditioning. But Freud did not believe trauma caused perversion of sexual development until it caused conflict; conflict is the awareness of the need to choose between alternatives and requires a development advanced enough that memory, judgment, and perhaps fantasy are beginning to influence one's behavior.

His theory of the causes of perversion[5] (as with all sexuality) is a combination of the five categories we have been considering: bisexuality, the Oedipus complex, the primacy of the penis, libido theory, and conflict. Granted that there are variably powerful diatheses, such as inherited bisexual tendencies or an unusual constitutional capacity for pleasurable sensation in a part of the body other than the genitals, he felt that, above all else, it was infantile conflict—castration anxiety, pre-oedipal and oedipal conflict, fear of heterosexuality—that changed

[5] I am retaining the quaint word "perversion" (rather than using the more neutral terms "variant," "deviation," or "aberration") for the habitual, preferred, compelling need to perform an erotic act when the deviant act arises from severe anxiety and the act protects the person from the source of anxiety. This implies that there are both perversions and variants—the latter not the result of such anxiety. Freud's theory, incidentally, seems to leave no room for the idea of a sexual aberration that is not also a perversion, i.e., a habitual aberrant erotic act that is not the product of conflict: "We were thus led to regard any established aberration from normal sexuality as an instance of developmental inhibition and infantilism" (12, p. 231).

normal sexuality into perversion.[6]

Sexual deviance (perversion or nonperverse variance) leading to orgasm is almost never seen in animals (unless they have been manipulated by unnatural forces, such as experimentation or captivity). On the other hand, such needs are ubiquitous in man; sexual deviance is as exclusively human as are murder, humor, fantasy, competitive sports, art, or cooking. This observation is so grossly manifest that one wonders why it has no force in the speculation of modern sex researchers. *Almost every notable study on human sexual behavior since Freud has tried to prove that one does not create his own deviance* but rather that it is thrust on him—by genes, by hormones, by electrical circuiting in the brain, by imprinting, by conditioning, by statistics. How Freud has disturbed us! We still cannot bear his "accusation" that we are humans.

Will someone please explain pedophilia in geneticists' terms? Or shoe fetishism as a product of a brain mechanism constant through evolutionary development? Or penile exhibitionism as a hormonal defect? Or the need to rape old women as the effect of conditioning? Or necrophilia as merely a statistic at the outer reaches of a bell curve?

The new research seems aimed unanimously at tearing down the conflict theory; no other aspect of Freud's system has created such resistance, perhaps because Freud believed perversion is *motivated*, i.e., that a person is somehow, in his depths, in part responsible for his perversion. The deviant act, Freud felt, is the product of the great human capacity for choice and so ultimately has a moral quality (even if one's responsibility is mitigated because the choice is unconscious and was arrived at because of unsought threatening circumstances in childhood). The modern researchers, however, deny that intrapsychic conflict plays a part or that fantasy propels and perpetuates deviant activity. In other words, these critics say it is not psychically motivated. Oddly, their same research can apply to nondeviant behavior, for their logic says that *all* sexual behavior is *not* psychically motivated. They believe this in their laboratories and at their desks. Do they also believe it in bed?

ATTACKING CONFLICT THEORY

The attack on conflict theory has taken four forms. The first says that the aberrations in humans are due simply to physiological mechanisms—either organic dysfunction or inherited normal physiology that merely produces behavioral variance of the same type as that seen in lower animals and as the result of the same brain and hormonal mechanisms that are present in lower animals. In the second explanation (learning theory), the deviation is inflicted by an outside force, e.g., conditioning, and so is not a matter of choice and has no origin in fantasy. The third is statistical: there is a bell curve for sexual behavior, and the variations are not abnormal, just not normative. The last says that, while a culture may pronounce a variant pathological, it may only be the social condemnation that is pathological, not the behavior—i.e., the society rather than the individual is sick.

Genetics and Constitution

The following represent the kinds of studies which attempt to demonstrate that sexual aberrations are induced by physical, not mental, forces.

There is much fine animal work (summarized in [33, 34]) since there are now techniques that can be used to influence large areas of the brain by electrical and chemical stimulation or ablation or by the deprivation of REM sleep. These experiments create disruptions in normal sexual patterns in animals, hypersexuality and/or indiscriminate sexual behavior, during which the animal may not care about the sex or sometimes even the species of the object of its attentions. Then there are experiments in which minute amounts of electrical or hormonal stimulation of tiny, circumscribed areas of the brain can change sexual function (35). But our old problem remains: how do *these* neural substrates in animals relate to *that* man's buying photographs of enchained women; why did *that* woman, who was a feminine girl till age six, grow up to be so masculine?

As yet, obviously, no comparable work has been done on humans, though we know that sexual behavior can be changed by manipulation of the brain (32). I have already mentioned a neurosurgical cure of male homosexuality (8). A cure of male homosexuality (36) and treatment of hypersexuality (37) by antiandrogens have been reported. Several reports have tried to implicate the temporal lobes in fetishistic behavior, especially cross-dressing, but these have been either single cases or studies with too few subjects (summarized in Blumer [38]), have lacked adequate controls (39), or have simply been ruminations on research (40). They indicate that a rare case may be associated with temporal lobe disorder, but they do not encourage belief that such brain disorder underlies all such behavior (41). (Why are there no reports of women so affected?)

As to the claims that constitutional predispositions may make certain people susceptible to their particular deviance, there simply is no acceptable evidence as yet, except in the rarest instances (3, 5). No competent studies have shown family tendencies in any of the perversions, except perhaps in homosexuality. The view generally held in the early 1900s—that perversion was the result of "degeneration," meaning some diffuse physical inferiority—has never been backed up by evidence. But all studies, and there are very few, that have tried to demonstrate genetic factors in homosexuality (6, 7) have been unable to withstand the attack of critics so far (42–44).

[6] In addition to this oedipal (interpersonal) theory, Freud felt that specific elements in perverse acts are the result of libidinal fixation. By this he meant that, when the child's further development is blocked by castration anxiety, the boy or girl may fall back upon earlier libidinal gratifications. If, for any reason, the mouth, anus or bowel, urethra, skin, or any other part of the body had been the focus of intense libidinal excitement earlier, the child could regress to this safer and more gratifying "position" in the face of severe anxiety. This accounted, for instance, for anal intercourse among male homosexuals or oral intercourse among male or female homosexuals.

Even Money's observations of fetally androgenized females show that the girls become only mildly masculine in behavior; they are nonetheless heterosexual (3).

It is too soon to say whether this work on genetics and brain function tests psychoanalytic theory (though it could result in treatments that would make psychoanalytic therapy obsolete for some sexual disorders). One must always be cautious (as I was not quite when speculating above about the significance of a pleasure center in the central nervous system) not to equate the discovery of midbrain mechanisms with integrated, motivated human behavior. The limbic substrates for oral and genital behavior lie close together; how many people seriously think that is how man invented oral intercourse? Is the foot center close to the genital center in a foot fetishist? Is masturbation due to activation of a masturbation center in the hypothalamus? I think some of the modern theories were invented by a computer. At the least, it will take a few generations of research on the cortex before we know much about thinking, desire, and behavior; such a cortex does not exist in other species.

Perhaps the greatest recent challenge is found in the reports described above, under Constitutional Bisexuality, which show that the more exclusively homosexual a man, the lower are his testosterone levels and the more defective his spermatogenesis. Such findings, if confirmed, would greatly reduce the importance of a theory that says the condition is caused by disruptions in a boy's relationships with his mother and father. We will have to await further studies that control for such nonspecific influences as stress (45), normal variations in hormone levels during a diurnal cycle, normal variations in semen quantity and content, drug intake (since marijuana may lower plasma testosterone levels), etc. Already there is a nonconfirming study (46).

Learning Theory

Learning theorists are the second group whose research opposes the idea that sexual aberrations are compromise formations serving to salvage sexual pleasure from a situation filled with anxiety and conflict. There does not seem to be a learning theory that attempts, as does psychoanalysis, to account for the development of erotic behavior in humans, behavior that leads either to "normal" heterosexuality or to the aberrations. However, there are studies that suggest we may find roots of sexual behavior that are not the result of intrapsychic conflict.

Imprinting of infant creatures at a critical period can cause attachment to an inanimate object, an animal, or a man, when they would normally be so attached to their mothers. In adult life their choices for mating may then be of the type of the imprinted object (47). While the conceptualizations behind these observations have been extended to the human infant (48–50), no confirmatory data are yet available.

The contribution that classical conditioning makes to the development of sexual behavior has also been investigated. This can be summarized by the belief that, in animals, almost anything is possible in the laboratory: by means of conditioning techniques, an animal can be trained to become sexually aroused by objects that would have no such power in the natural setting; even styles of gratification, such as masturbation, can be artificially produced. How or whether these findings are related to the development of sexuality in free-ranging conditions is unknown.

"Interpersonal" relations as contributory to the development of sexuality have also been investigated in animals. For instance, overcrowding has produced abnormal effects in animals, changing their object choice, styles, frequency, and capability of intercourse (51). Experiments with monkeys raised by abnormal mothers, including inanimate mothers, have caused profound disturbances in socialization and the capacity for reproductive behavior (52). Defects in sexual ability also occur when monkeys are deprived of peer relationships when young (53). These studies seem to justify the stress analysts lay on the influence of interpersonal relationships in early life on later sexuality.

My enthusiasm for many fine animal studies is reduced if the author is unable to resist the temptation, on finding an experiment that produces abnormality, to extrapolate directly to human behavior, even to suggesting modifications in child rearing or in the functioning of whole societies on the basis of his findings in, for example, rats.

Experiments in human conditioning that produce sexual behavior are rare. In one, an easily extinguished mild fetishism was artifically produced by pairing erotically stimulating pictures with shoes (54). Positive and negative reinforcements in a culture may account for changing sexual styles from generation to generation (e.g., women's fashions).

Social learning theorists stress the effects of shaping—reward and punishment—in creating aspects of personality (55, 56), as well as the effects of imitation and identification. Freud and other analysts have also stressed these, as in discussions of the development of the ego and superego (57–60) or core gender identity (5). There are studies on identification in which some learning theorists and psychoanalysts find common ground. These show that the infant-child who spends considerable time in a close and warm relationship with a parent may pick up the gender qualities of that parent. Thus a boy too close to his mother may be feminized but be masculine if he is with his father, and vice versa for girls (5, 18). Analysts disagree with most learning theorists in believing that personality development does not occur without the influence of intrapsychic conflict over affectionate and sexual issues as well.

"Taxonomy"

The third argument is the statistical one, or, to use Kinsey's term, the "taxonomic." (That word was chosen for its implications of objectivity, naturalness, and absence of moral judgement; "normative" is cooler than "normal.") It takes the stance of the naturalist observing humans just as he would another animal species. In Kinsey's hands it became a powerful research tool, though it was just as powerful as a hammer of social morality,

since in this crafty way Kinsey made a judgment by saying we should be nonjudgmental.

His data (61, 62), and the good subsequent sociological work (such as by Gebhard and associates [63]), have not shaken analytic theory, for they demonstrate what analysts had long since known—that human sexual behavior is far more variable than had been admitted. Kinsey's challenge is not in his data but in the positions he took before he even collected any data—that inner life is not pertinent to this psychological research: the observer knows enough when he has finished counting. In that regard, Kinsey is allied with the behaviorists.

Cultural Relativity

The fourth argument extends the third and is exhortative. Here the author uses the research of others to support his position for sexual freedom. This is especially the case with activists banded together to relieve the guilt and social degradation traditionally laid upon them. Homosexuals exemplify this approach, drawing from the first three categories above to deny allegations of abnormality or illness: first, their condition is widespread in lower animals, is inherited, or is hormonally or otherwise physiologically induced; or it is the result of conditioning in childhood and/or adolescence; or it is aberrant only statistically. Crucial for each of these defenses is the relief of guilt: since one's self did not choose it, one is not responsible for it, and besides the condition is not shameful.

There is a great deal of turmoil today (64–68) over whether aberrant behavior is perverse (i.e., nasty or sick) or only deviant (statistically askew); the key words have been "normal" and "healthy." These arguments have been less than inspirational because the contenders, each with Science by his side, have ignored what the opposition meant by "normal" or "healthy." The one group says the perverse person is abnormal because the aberrant behavior can be traced back to childhood trauma and conflict. The other says the deviant is not abnormal because he manages his life, other than his personal preferences, no more peculiarly than heterosexuals, who are not particularly noted in the mass for their happiness and creativity.

For myself, I agree with both—and with neither. I think many aberrations are perversions in the sense that they emerge as solutions to conflicts and thus secrete a burden of guilt and a sense of risk-taking in their core. On the other hand, I do not believe these dynamics cripple most of their owners any more than does the conflict-solving process that produces normative (heterosexual) behavior.[7] We may not solve these moral issues, which masquerade as scientific ones, as easily as each side hopes.

CONCLUSIONS

My task has been to reflect on the impact of the new advances rather than to detail the latter, and so these conclusions can only be opinions.

To sum up, I think the measurable impact on psychoanalytic theory has been mild. First, the theory was drawn up in such a way that most of it cannot be put as propositions to be tested by any scientific procedures yet devised. Second, psychoanalysis concerns man, but the new research does not yet have the techniques to answer its own primary, though usually unstated, goal: to show how the findings of any experiment on animals or on an isolated part of a human subject's physiology or psychic function bear on the sexual behavior of a human in his life as a person, not as a laboratory subject. Still, while the measurable impact on theory has been mild, the impact on analysts may be considerable. Many are listening closely to the researchers; and into the writings and conversations of analysts there is coming an impatience with being confined to theoretical positions that are held together more by tradition than by data.

As in many other areas of psychiatric research, new techniques have led to an upsurge of interest and of findings in the neurophysiological (including chemical) mechanisms involved in many aspects of sexual behavior. Along with this excitement inspired by fine experimentation, there is less enthusiasm than ever for the investigation of sexuality in the human by clinical methods, especially by collecting data in the supportive environment of proper treatment. I think that nothing but good can come from the increased laboratory work and that nothing but bad can come from ignoring the single case studied in depth.

It will be useful if we can reverse the belief that the clinical method is either too weak (as some laboratory scientists are convinced) or has finished its task (as some psychoanalysts tend to feel). Now, years after the work of such observers as Freud, Krafft-Ebing, and H. Ellis, we still need naturalistic observations on sexual behavior, normal and abnormal. The work of Masters and Johnson has convinced us of this. But I am not now referring only to the observation of gross physiological response, which they are doing, but to collecting exact subjective descriptions of the sexual experience, the accompanying fantasies, and the indications of unconscious processes and childhood influences that the psychoanalytic method can collect.

And there may be additional bonuses if we revive clinical research on sexual behavior. For instance, from this neglected area can come great insights into the causes of violence, the current research of which is more to be commended for its volume than for its discoveries. It is no coincidence that violently aggressive people usually have bizarre sexual impulses and severe conflicts about masculinity and femininity. There is a second area that sex research may clarify: some legal and moral issues that turn on questions of responsibility and of normalcy may melt away under the heat of the facts.

Perhaps the group that can give us the most, because they have provided the least so far, is the anthropologists. Their acceptance of sketchy, anecdotal material and their failure to develop a method for gathering detailed, accu-

[7] This is less true as the aberration is more bizarre.

rate material on such a private subject as sexual desire has crippled our understanding of human sexuality. We simply cannot do without their cross-cultural studies, but we also cannot afford the superficial and opinionated reports they have too often given us. Certainly we analysts need their findings to keep us honest, that is, to keep us from generalizing too rapidly from the particular patient we analyze—a member of our culture—to humanity at large.

Finally, I would suggest that we not be jaunty; we still know very little about the mechanisms or causes of human sexual behavior, normative and variant, normal and abnormal. We still know too little about what effects the unfolding of sexuality after the essential inputs of heredity, constitution, and early environment. We know too little even about what people do, what they think they are doing, what they think while they are doing it, and what they think of what they are doing. However, I hope I am not too optimistic in saying that we are now developing, for the first time, tools and ideas that will enable us to study these issues well.

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Motivation for Medicine in the Seventies

BY JOHN F. MCDERMOTT, JR., M.D., WALTER F. CHAR, M.D., AND MARGARET J. HANSEN, M.S.W.

A department of psychiatry in Hawaii undertook an exploratory study of the motivational patterns of entering freshmen, relating these to problems of selection, performance, and the educational system itself. The authors, noting that the motivations of students seem to be changing and that a different value system is emerging, call for further study to more accurately assess the values and needs of prospective students and to reassess the educational process.

WE ARE NOW in the era of redefining the objectives of medical education and of redesigning curricula on the basis of these new objectives. These changing directions have vast implications for the selection of medical students. This paper is an attempt to sort out some factors that are important in the process of selection of medical students within the context of changing medical objectives.

In the past, it has generally been felt that the Medical College Admission Test (MCAT) and premedical grade-point average (GPA), if used as principal criteria for selection, would identify the smart, achievement-oriented individuals who know how to get good grades (1) and would be successful in medical school. Recently, however, educators have been questioning more and more the correlation between scientific ability and clinical competence in the practice of medicine. It is increasingly observed that the entry profile of the medical student is heavily biased toward scientific achievement in college and performance on the MCAT. These measures are probably relevant in predicting achievement in the first two years of medical school, when basic sciences are emphasized, but are probably less valid as criteria for clinical competence. For example, it is now generally agreed that the MCAT, "with its limited objective to predict successful academic performance in the basic science segment of the medical school curriculum" (2) should be made more responsive to current needs.

There have been many attempts to consider other factors since the 1950s, when studies focused on the medical student and the fundamental process of becoming a physician (3, 4). Lief and associates (5) and Menninger (6) presented psychological profiles of students (predominantly obsessive-compulsive) and hypotheses of various unconscious motivations for medicine as a profession (healing instead of hurting, curiosity, mothering, etc.). A number of studies attempted to assess a personality factor in the selection of medical students; the MMPI was the most commonly employed measure (7). These and other studies produced findings that were conflicting when the student's progress was followed. Some researchers believed that the best students were more sensitive and idealistic (8), others that the best students were more aggressive and ambitious (9)—that successful students were influenced more by a desire for independence and prestige than unsuccessful students, who were more influenced by religious and service motivations. Personal motivational factors *are* likely to be crucial determinants for predicting clinical competence, but they, like competence itself, are very elusive and cannot be measured satisfactorily; this may account for the overuse of factors that can be quantified.

Recent innovative efforts to examine selection criteria seem more promising than those of past decades. The admissions committee at McMaster University Medical Center in Ontario, Canada, for example, has developed a complex selection procedure that includes the evaluation of student essays to assess personal motivational factors such as: motivation and goals; attitudes toward the McMaster M.D. program; response to intellectual, personal, and social problems; personal relationships; and self-appraisal (10).

The present study, conducted at the University of Hawaii School of Medicine, is an attempt to further refine our understanding of social motivations in medical students in the 70s and to explore the significance of these motivations for medical education and the practice of medicine. The implications are important, for this is an era when the role of medicine and of the doctor is in transition, reflecting changing social structures, values, and needs. More physicians now need to be trained more rapidly and to be prepared for new models of community practice. The doctor of the 70s will be required to be more flexible and versatile, to be able to collaborate, and to inspire a broader basis of community participation in medical care delivery than physicians in the past. On the surface, at least, these requirements seem in conflict with traditional medical student motivational patterns related to intellectual mastery, autonomy, independence, competitiveness, and aloofness. Medical educators are recognizing that there is a potential for increasing conflict between the changing needs of medical practice (which

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medical education must meet) and the traditional selection process of medical students.

METHOD

At the University of Hawaii School of Medicine, the Department of Psychiatry has undertaken an exploratory study to examine the motivational patterns of entering freshmen and to relate these to the problems of selection, performance, and the educational system itself. The initial phase of this project involved a request to each freshman entering in 1970 to write a personalized essay about why and how he decided to enter medicine. The essays were examined for patterns of motivation, with consideration given to sociocultural factors that are important in studying our multiracial student body.

Next, the top ten and bottom ten students (the latter expanded to 16 because of identical grade-point averages for tenth place among seven students) were compared as to the form and content of their essays at the end of their freshman year.

The limitations of this study are well recognized. Our analysis of the essays is highly subjective and impressionistic. Lack of a statistically controlled sample, as well as the difficulty in measuring essay content and the weakness of using only grade-point averages at the end of the first year as a criterion of adaptation, are to be questioned. However, the special advantages of this population for such a study—their lower socioeconomic status and racial mix[1]—should also be recognized. The multiracial, lower socioeconomic class students who participated in this study may, in fact, accurately reflect the motivational characteristics of future students, for the trend is to broaden the socioeconomic, cultural, and ethnic base from which medical students are selected.

Thus our results and discussion of them serve mainly to raise questions and to point to directions for further study. We hope eventually to define criteria leading to the development of a motivational measurement profile that will be useful to the students, the school, and the community. In addition, we hope to raise questions about the reciprocal relationship between selection and the educational system itself.

RESULTS

All students gave more than one reason for entering medical school; the motivational patterns appeared to fall within three broad categories:

Personal Motivations

This category has traditionally been considered the principal one among medical students and implies certain personality characteristics. Our students described entering medical school as part of their striving for independence, social status, respect, acceptance, recognition, financial security, and personal stimulation. The need for autonomy was stressed as a motive; one student expressed it this way:

> In retrospect, I would say that the greatest appeal for me in medicine [is] the opportunity to work independently. I think my desire to work independently has very deep natural roots. One of the most powerful urges in man is ownership, and I wish to have a profession in which the end product is something which I can largely call my own work.

Medical school and medicine were seen as an experience that would provide opportunities for competition, recognition, and self-assurance—described by one student in this manner:

> Throughout school, I always wanted to be number one. I wanted to read the fastest, to make the best grades, and to outdo everyone simply for an enjoyable distinction. . . . I always ended up with the leading part in plays, I starred at sports, and even did well flipping bubble gum cards.

Personal Factors Related to Family and Ethnic Motivations

This category, while also a traditional one, undoubtedly has special significance and emphasis in our population. Students cited many examples of experiences within their families that motivated them to enter medical school. Many students described the sacrifices they had seen their parents make in order to provide for them and send them to school; they felt that becoming a medical doctor would be a means of repaying that debt. This was particularly true of the large Oriental group of students found in Hawaii. Other students described feeling pressured by family expectations or by competition with siblings for achievement. Hawaiian students wanted to disprove what they felt was a stereotype of laziness.

Critical experiences having to do with illnesses and deaths occurring in their families seemed also to be decisive factors in many students' decisions to enter medicine.

Many of the students presented material in their essays to indicate that they had unresolved conflicts with their parents that were related to their motivations for entering medical school. Such conflict was described this way by one student:

> My father . . . was brought up in the old tradition which taught that a father must be strong but, for the most part, silent. . . . The tradition of silence meant that he had very little contact with the four of us. He never concerned himself with the affairs of his children.
>
> Obviously, I did not feel loved at home, so I was forced to find it [love] among my friends at school. . . . I gained respect from my friends on the basis of my achievements in school. . . . Becoming a physician [is] a compensation for my feelings of inadequacy, a means to gain respect from the community and my friends.

Social Motivations

This category, often previously called "service" and

[1] In a previous study at the medical school of the University of Hawaii it was found that two-thirds of the students chose this school because of financial considerations; one-half of the students in the class came from families with an annual income of less than $10,000.

associated with poorer students than with those who were primarily status-oriented, was the most prominent and significant one among our students of the 70s. It seems to be qualitatively different as well. Of course, some of the social concerns were stated rather simply—wanting to help the weak, the sick, and the poor, to relieve human suffering, and to combat death. Some described religious backgrounds that were related to their vocational choice and combined their broad social and religious idealism with a specific personal identification with such figures as Tom Dooley, Albert Schweitzer, and Robert Kennedy.

It was particularly noted, however, that the majority of the students expressed their social concerns in a complex, realistic manner, reflecting a deep personal involvement with the issues and concerns of the 60s and 70s.

The conflict in Viet Nam was mentioned repeatedly as a social issue that had affected the lives and aspirations of the students. One student who had actually been in Viet Nam stated it this way:

> In retrospect, this experience had more impact on my attitudes than any other single experience, in that it provided the impetus for active pursuit of a medical education.... Unimaginable poverty was a real and daily sight in many areas visited. In Viet Nam, the effect of war on a generation of people was tragic. In this environment, medical doctors were critically needed. The work of physicians and corpsmen in providing even elementary medical aid to these people was quite impressive. It was felt that these medical personnel were really engaged in a rewarding occupation and I wanted to become a part of it.

Almost all the students wrote directly or indirectly of going into medicine as a way of self-actualization, of finding a more holistic approach to life in an existential sense, and of experiencing personal interrelationships with others. One student wrote:

> The patient-physician relationship has emotional components that transcend the physical reality of what the relationship accomplishes. I find it difficult to express, but there is something about this that is outside of time and place. Such concepts as friend or love are similar in that the true reality of the concept is not limited physically. The physician becomes a part of the patient's life and the patient reciprocates. It is a basic, primary relationship and probably has identifiable components that are similar in all cultures, perhaps in all times. There is a mysticism, a sharing, that is basic to the relationship which appeals strongly to the emotional part of my nature. This sharing of sickness and the attempts to alleviate it give meaning to the doctor's life in a way unique to medicine.

In discussing their social motivations, many of the students indicated their understanding of the potential for conflict in their choice of medicine as a career. They could already feel the basic contradiction between those forces motivating them to compete, to acquire financial security and status, and those forces which motivate them to be involved in the social-relationship issues that concern young people today.

One student expressed it this way:

> I fear what I am becoming, as I am beginning to contemplate the money I can make, the desire to specialize and escape the small town which was the original reason I wanted to enter medicine. I am beginning to feel the draw of power and status.... I am beginning to have a lack of enthusiasm for learning, and have begun to feel that I will never again be free and able to relax, to really be a father and husband, to be my own self, to do what I want to do.

Further Analysis of Essays

In an attempt to extend the analysis of the essays further, the best students were compared with the poorest students by grade-point average at the end of the first year of medical school.[2]

The most significant finding seemed related to the strong element of personal and family conflict in motivation for medical school, which was found equally and almost universally in both groups but was expressed in different ways. Among the students with the lowest grades there appeared to be a markedly less logical and smooth progression toward medicine. They backed into medicine because it was the most practical thing to do, or medicine appeared to be an inspirational mission in which the students seemed overly involved with personal and family pressures to prove themselves worthy. The students with the best grades also manifested conflicting motivational patterns, but they were more logical and better organized in their presentation of life's experiences and events. They seemed more independent in detaching themselves from the anxieties in their lives and did not continue to reiterate them. Their social idealism seemed tempered with scientific interest and experience in dealing with people.

It appeared that many of both the top and the bottom students in the class had not come directly to medicine but had spent time going in other directions and exploring other vocational opportunities. Neither group had more time than the other to work out the conflicts that appeared so prominently in their lives, but the best students showed an organized and integrated approach to their choice of medical school, suggesting that entering medicine was a final phase of a resolution rather than another symptom of conflict.[3]

[2] Correlating the students' academic achievement in their first year with their entering GPA and MCAT scores revealed that in the top ten students six had higher and four had lower MCAT scores than the class average (548); comparing their GPA scores, six scored higher and four scored lower than the class average (3.04). Only one, however, was below his class average in both his GPA and MCAT scores.

Of the lower 16 students, 12 had lower and four had higher MCAT scores than the class average; again 12 had lower and four had higher GPA scores than the class average. Here nine students were below class average in both the MCAT and GPA scores.

Thus, our preliminary studies do seem to indicate that the traditional reliance on MCAT and GPA scores in medical education has some merit for the first year at least. (This is especially true if the MCAT and GPA scores are used jointly.) But they seemed to be a better prognosticator of academic failure than of academic success.

[3] This, of course, is not surprising; it is consistent with impressions of medical students made by others. Utilization of the human figure drawing in predicting academic failure or success (11) has suggested that the relatively unsuccessful students were more likely to produce drawings that were poorly organized, faintly sketched, and lacking in detail and in a systematic approach to the task; the more successful students produced drawings that showed better overall organization and appropriate detailing and that gave the impression of a higher energy level.

DISCUSSION: SOME IMPLICATIONS

Several of the findings, although tentative, seem relevant to current issues in medical education. The medical students who participated in this study seemed to have broader motivational patterns than did students in previous decades. They evidenced the expected personal and family motivations. However, what was called "service" motivation in the past (11), sometimes identified as characteristic of the poorer student, seems to have changed qualitatively and quantitatively. It is seen as a primary and powerful personal part of the identity formation of the young student physician of the 70s. The students seemed to be highly conscious of contemporary social issues and concerns and to have directly related them to their choice of medicine as a career. However, this strong social relatedness also seemed to produce conflict with other motivational forces, such as motivation for status, financial security, and independence, and also possible conflict between their self-definition and the rigorous demands made of the medical student and physician as defined by medical educators in the process of medical education. Some degree of conflict as to motivation was observed in all of the essays, but the approach to the handling of the conflict by the individual student seemed to be the crucial factor in his ultimate success.

Implications for the selection and recruitment process are important. With the need for many more physicians with different styles of functioning and with an increasing emphasis on clinical competence it is essential to more accurately define and measure clinical competence and to assess and predict which motivational factors are associated with this most important quality and end product of medical education. A profile of minimal basic traditional ingredients, such as seriousness of scientific purpose, conscientiousness, thoroughness, etc., should not be thought of as the only or complete profile or extended to embrace associated compulsive character traits as an ideal. Rather, these traditional motivations need to be combined with social motivation; i.e., the *kinds* of motivation and their integration become more important in student assessment today than the intensity and single-mindedness of the motivation. Perhaps a method of measuring these behavioral factors and the capacity for conflict resolution can be designed on the basis of further study of motivational patterns and can be weighted in the student's entry profile. This behavioral profile, together with the traditional MCAT and GPA scores and the pre-admission interview, would give a more complex and comprehensive view of the prospective student and, one hopes, would point the way toward the recruitment and selection of the kind of student with broader qualifications and capacities who may not be entering medicine at present.[4]

Finally, the findings of this study have implications not only for medical school admission policies, but also for the process of educating students once they have been admitted, for the process of medical education produces stresses on the student that change him and his values and affects the resolutions of his conflicts either favorably or unfavorably. Perhaps an effort should be made to reconsider the stresses of medical school, to make medical education more continuous with other total life and social issues (as is being done through the introduction of early clinical experience), and to encourage student-developed programs for the medically underserved.

Within this context many pertinent questions can be raised. Can medical educators build some solutions into the educational process itself, in order to enable students to deal with increasing conflicts around value systems, identity crises, and interpersonal problems as they struggle to cope with the increasing complexities of the role and function of medicine? Can improved, more easily accessible counseling facilities be provided to assist the student with such crucial problems as the effect of the demands of medical school on marital and family relationships and the critical choice of a medical specialty? What of the issue of the length of medical school education? Does the trend toward shortening medical school and abolishing internships shorten the time medical students need to mature and resolve conflicts in order to establish themselves securely in the role of physician?

Today's students seem to value an awareness of others' needs and collaboration as much as previous generations valued individual, competitive achievement and success. It therefore becomes understandable that they favor a pass-fail grading system and find the curved GPA in direct conflict with their motivations and the qualities they feel are needed in the future physician.

One thing seems clear. If the motivations of students are changing and a different value system is entering with the new students, a seriously disruptive generation gap will exist unless the faculty and the educational system recognize these changes and adjust to them. To admit new kinds of students into the same system that rewards only the older, narrow kind of student profile is dangerous and self-defeating. Further study is needed to enable us to more accurately assess the changing values, motives, and needs of prospective students and to reassess the educational process and the significant ways in which it shapes the future practitioner.

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FORTHCOMING SPECIAL SECTIONS

The April issue of *The American Journal of Psychiatry* will include a Special Section on suicide. That issue will also contain an article by Lloyd J. Thompson, M.D., of Chapel Hill, N.C., titled "Learning Disabilities: An Overview."

The Special Section in the May issue of the *Journal* will be concerned with undergraduate medical education.

Emergency Room Treatment of the Drug-Abusing Patient

BY JAMES L. CHAPEL, M.D.

The author outlines the preferred treatment of patients appearing for emergency care with acute symptoms suggesting drug overdose or a "bad trip." He discusses symptoms and treatment of patients who have abused heroin, "downers," alcohol, stimulants, cocaine, hallucinogens, marijuana, or belladonna derivatives.

METHODS FOR TREATMENT of the acutely reacting drug abuser appear to be inconsistent and widely diverse. Furthermore, and much more important, a majority of practicing physicians admit their lack of knowledge on how to deal with this problem. Discussions with residents (both medical and psychiatric) who are responsible for emergency room services reveal that their management of these cases is dictated largely by their intuition or by "lapel holding consultation" with the few staff physicians who have had experience with this type of patient. It would thus seem appropriate to present a brief outline as a point from which to begin when a physician is faced with a drug abuser with an overdose (OD) or a "bad trip."

I will deal only with the more commonly abused drugs and will begin by describing general procedures applicable to all unconscious patients to be considered here.

GENERAL GUIDELINES: UNCONSCIOUS PATIENTS

Respiratory adequacy must be ensured immediately, since this is usually the most important single factor in determining life or death for the patient. The airway should be cleaned and the physician should breathe for the patient if he is unable to do so himself.

The vital signs must be attended to and recorded as indicated: level of consciousness, deep tendon reflexes, pupil size and reactivity, blood pressure and pulse rate, and respiration.

Intravenous administration of a solution of five percent dextrose in water should be started; the blood drawn at that time should be saved for study of drug levels.

Urinalysis should be done as soon as possible.

It is important that the family or friends who brought the patient to the emergency room be asked to remain and give pertinent information. Samples of the drug that the patient may have taken should be requested for laboratory assay, since few of the drugs are pure. Personal information such as life-style, preference for certain drugs, dosage usually taken, etc., should be requested. The physician should also ask about the presence of physical conditions that may mimic a drug reaction (diabetes, seisure disorder, hysteria, etc.) or complicate the primary problem. Assume and be concerned about the possibility of multiple drug use and of the coexistence of alcohol.

TREATMENT OF CERTAIN DRUG OVERDOSES

Heroin

The unconscious patient. The overdose may be due to a willful intentional overdose ("hot shot"), or it may be accidental.

Signs and symptoms include apnea or slow respirations (2–6 per minute); cyanosis; absent reflexes; pulse varying from strong to weak, depending upon the degree and duration of hypoxia; small pupils; and urine testing positive for opiates. If the overdose is severe, pulmonary edema and/or respiratory arrest may result. If the patient is in pulmonary edema, he should be treated in the orthopneic position and given a diuretic, e.g., 20–40 mg. of furosemide (Lasix) intravenously in one to two minutes. Digitalization should be considered, as well as intubation or tracheostomy, plus continuous positive pressure ventilation with an oxygen concentration of at least 40 percent.

Specific treatment consists of administering one of the narcotic antagonists: levallorphan tartrate (Lorfan), nalorphene (Nalline), or naloxone hydrochloride (Narcan). These counteract or prevent excessive respiratory depression resulting from the use of heroin, morphine, or other drugs with a morphine-like effect (e.g., hydromorphone [Dilaudid], methadone, leritine, alphaprodine [Nisentile], and meperidine [Demerol]). Administration of an antagonist to a patient with severe respiratory depression due to these drugs usually causes a prompt increase in the respiratory rate and minute volume. If opiates are *not* the cause of the coma, then the antagonists themselves act as opiates and may cause respiratory depression with repeated doses. Especially is this true with a patient who already has depressed respiration, as in barbiturate poisoning.

The dosage of levallorphan tartrate is 1 mg. administered intravenously; the dosage of nalorphene is 10 mg. administered intravenously. The dose may be repeated at 10–15 minute intervals if necessary, but no more than three doses should be given.

Naloxone hydrochloride (Narcan), a new antagonist,

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The author wishes to thank his colleagues Charles Mengel, M.D., and Garf Thomas, M.S., for their help in reviewing this paper.

does not depress respiration. The dosage is 0.4 mg. administered intravenously or intramuscularly in adults; this can be repeated as needed without danger.

If veins are "burned out," one should inject into the base of the tongue or the jugular vein.

It is important to note that if the overdose is due to methadone, breathing should be monitored for 24 hours because toxicity may last up to 24 hours, while the antagonists are effective for only two to four hours.

"Downers"

These include barbiturates and nonbarbituric sedative-hypnotics and anti-anxiety agents such as diazepam (Valium) and chlordiazepoxide (Librium).

The unconscious patient. Signs and symptoms include shallow respirations (may be slow or rapid); circulatory collapse; cold, clammy skin; cyanosis; constricted and nonreacting pupils; hyporeflexia or areflexia; and possibly pulmonary edema.

Treatment includes hospitalization and use of general guidelines (see previously) for the unconscious patient. Gastric lavage may be dangerous in any comatose patient because of the possibility of aspiration pneumonia. An endotracheal tube with cuff should be inserted under direct vision before a gastric lavage is begun. Hyperthermia and cardiac arrhythmias are also dangers.

There is no true antidote for barbiturates. The artificial kidney or peritoneal dialysis may be indicated in severe cases, but ventilation and fluid management will usually suffice.

The clinical picture of intoxication from anti-anxiety agents resembles that of barbiturates; management is the same (1).

The conscious patient. Signs and symptoms include a "drunk" state; respiratory depression in which the depth is affected but not necessarily the rate; incoordination-ataxia; drowsiness; smaller pupils than normal; mental confusion and disorientation; slurring of speech; headache; and nystagmus.

There may be euphoria, irritability, or excitement. Moderate or severe poisoning may cause delirium or stupor.

In regard to treatment, if the patient is responsive, drugs should not be given. If he can swallow and has ingested the drugs, 30 cc. syrup of ipecac or 2–3 teaspoonsful of powdered mustard in water should be given to promote vomiting. Supportive care should be continued in the hospital. The condition usually clears in one to two days.

Alcohol

Alcoholic hallucinosis. This may be short-lasting or may go on for weeks. The hallmark is auditory hallucinations. The patient is distrustful and has ideas of persecution and reference, but he is oriented as to time, place, and person.

Hospitalization is preferable.

Phenothiazines are indicated in the management: e.g., 200 mg. of chlorpromazine twice a day by mouth; this may be increased if necessary.

Acute alcoholic excitement. Some people develop acute psychotic reactions from alcohol, resulting in great excitement and combativeness, with or without hallucinations. This is usually a brief, self-limiting condition but can result in coma and death.

Treatment includes initial administration of 200 mg. of chlorpromazine by mouth and 50 mg. repeated every hour until the excitement starts to subside. Or 10 cc. of paraldehyde may be given by mouth every two to four hours until symptoms subside.

Alcoholic DTs. These are seen in chronic alcoholics during withdrawal or after heavy bouts of drinking; they can occur from one day to one week after the last drink.

Signs and symptoms include disorientation, fear, visual and sometimes auditory hallucinations, tremors, tachycardia, and sweating. There may ultimately be peripheral vascular collapse.

The condition lasts three to seven days and is sometimes fatal. During DTs the patient may be overactive, restless, and excited. He may try to escape from his hallucinations and may be suicidal. He can be very suspicious, aggressive, and unpredictable.

For treatment the patient must be hospitalized. Fluid balance is critical; most patients will require several liters a day. Paraldehyde should be given by mouth or intramuscularly every hour until sleep occurs and then every four to six hours. Or 100 mg. of chlorpromazine may be given intramuscularly every two to four hours. Diphenylhydantoin (Dilantin), 100 mg. every four hours, may be added to prevent convulsions.

Stimulants (Amphetamines, Methamphetamines, etc.)

Signs and symptoms include aggressive, explosive, paranoidal, and violent behavior; poor nutritional state if the patient is a chronic user; racing thoughts; such other symptoms as tremor, dry mouth, tachycardia, sweating, hyperthermia, hyperreflexes, lability, anxiety, tension, aggressiveness, and "crankbugs" (the sensation that "bugs" are crawling under the skin). There may be an elevation of blood pressure and there may be convulsions. (Chronic amphetamine use often leads to heroin use as a "downer.")

In regard to treatment, if the patient is very agitated and aggressive he should be sedated with 100 mg. of secobarbital (Seconal) by mouth, repeated every 30 to 40 minutes. Blood pressure should be checked. When the "high" starts to come down, the secobarbital should be stopped.

As an alternative, 50 mg. of chlordiazepoxide may be given intramuscularly, followed by 25 mg. orally every hour until the patient quiets down, or 20 mg. of diazepam by mouth, immediately followed by 10 mg. every hour until the patient responds.

Cocaine

Signs and symptoms include gregarious, hyperactive behavior, tachycardia, loss of appetite, racing thoughts, and euphoria. There may be crankbugs and/or twitching. Treatment should be sedation, if necessary, as in the case of patients suffering from an overdose of stimulants.

Hallucinogens

Those seen will be the small percentage who are having "bad trips." Overdose to the point of unconsciousness is probably unknown. In most instances the patient may report that he has had only one drug but it is more likely that he has had a mixture of STP, LSD, stimulants, cocaine, and even heroin.

LSD, mescaline, peyote, etc. Symptoms may include panic, anxiety, fear, depression, loss of control, or depersonalization.

The safest method of treating this type of emergency is "talking down." If the physician cannot do this himself, help should be requested from one or more experienced drug abusers in the community. If such help is not available, 500 mg. of chloral hydrate should be administered; it should be repeated in one hour. Or 20 mg. of diazepam may be given by mouth, followed by 10 mg. as needed.

Short-acting barbiturates such as secobarbital may be indicated at times in addition to, or instead of, chloral hydrate or diazepam. The patient should be removed to a quiet, well-lighted room and kept under observation. He should *not* be left unattended.

Assurance should be offered, and the patient should not be chastised, scolded, or argued with. It should be noted that no deaths directly caused by LSD overdose in an adolescent or adult have been recorded.

STP. "Bum trips" are more common with STP than with LSD; the patient is more anxious or panicky because of the stimulant-like effects of this amphetamine congener. The signs and symptoms include a high pulse rate, palpitations, and sweating. The patient may think he is having a heart attack. The treatment is the same as for LSD. Phenothiazines should be avoided.

Marijuana

Overdoses of marijuana or hashish are rare. If one sees this type of patient one should suspect an underlying emotional illness. Common symptoms of marijuana use are red eyes, increased pulse rate, and dry throat. Fear, panic, and agitation will be the chief reasons for the patient's appearing at the emergency room. There may be paranoidal thinking and feelings of depersonalization in the chronic abuser.

The treatment is the same as for hallucinogens; i.e., "talking down" is the treatment of choice. It is reported that a marijuana high may be ended by increasing the heat of the skin: e.g., through the administration of 100–200 mg. of nicotinic acid by mouth, a hot shower, or ingesting Mexican hot pepper (2).

Nausea and vomiting may occur from the ingestion of brownies or other sweets containing marijuana. Treatment for this, if considered necessary, is 1/150 gr. of atropine administered intramuscularly. It should be noted that no deaths have been reported from marijuana use.

Belladonna Derivatives

Atropine, scopolamine, etc., contained in such nonprescription drugs as Asthmador, Sominex, Sleep-tite, San-man, Mr. Sleep, and Contac are responsible for these reactions. The signs and symptoms include fixed, dilated pupils; dry mouth and skin; ataxia; mild tachycardia; hallucinations; toxic delirium (as in DTs) with amnesia after the "jag"; and hyperthermia.

Treatment should start with gastric lavage if the material was ingested recently (the tube should be well lubricated) or administration of an emetic (2–3 teaspoons of dry mustard in water).

One hundred mg. of sodium pentobarbital (Nembutal) should be given orally or intravenously (slowly) to a maximum of 300–500 mg. Or 10 cc. of parahydrahyde may be given orally and repeated every hour as needed; another alternative is 0.1 gm. of secobarbital by mouth as needed. Phenothiazines should not be used. Physostigmine salicylate, 2 mg. given intravenously or intramuscularly, has been recommended (3). The dose can be repeated in 15 minutes if necessary and at intervals of one-half to two hours if necessary.

General Precautions

A thorough physical examination should always be performed and such physical conditions as insulin shock, meningitis, subdural hematoma, and stroke should be ruled out. The physician should look for "tracks" (needle marks).

One should be aware that many drug users use multiple drugs at the same time.

The average hallucinogenic drug user does not become psychotic under the influence of the hallucinogen. If he does become psychotic, an underlying serious emotional problem should be suspected.

All acutely reacting drug patients should be kept in a quiet place. They should not be left alone. "Speed" (amphetamine) is dangerous. Users often are violent, explosive, and unpredictable. Users of barbiturates are also said to be dangerous and explosive.

Withdrawing alcoholics may seem alert and cooperative but may go on to develop DTs and become suicidal one to six days after withdrawal from alcohol. Patients with uncomplicated DTs have a ten percent mortality rate; if there are medical or surgical problems the mortality rate may be as high as 25 to 40 percent.

For a more detailed discussion of treatment of acute drug intoxications, see Koumans (4).

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Patterns of Drug Abuse Among Military Inductees

BY JOHN P. CALLAN, M.D., AND CARROLL D. PATTERSON, M.D.

A questionnaire concerning drug abuse was administered to 19,948 new military inductees over a six-month period. Almost one-third of the subjects had used drugs, but most were casual users. Marijuana and hashish were most frequently used. There were higher rates of use among college dropouts and men from unstable families, urban areas, and families with high incomes. There was little racial difference in overall drug use. However, nonwhites used amphetamines, barbiturates, and heroin twice as much as whites, while whites tended to use marijuana, hashish, and hallucinogens.

NOT TOO MANY years ago, reports to the general public concerning the abuse of drugs ranged from personally prejudiced views reflecting "no problem" to the alarmist's opinion that "Everyone's doing it." There were few scientific studies of the incidence of drug abuse. Soon, some civilian population "chemical Kinsey" reports appeared to help replace biased opinions with more objective evidence regarding the nature of the drug abuse problem in the United States. However, many of these earlier studies were concerned with drug abuse in college and university communities, which admittedly were a small segment of a larger potential, and perhaps actual, population of drug users in America.

Moreover, many of these earlier surveys were limited not only in terms of sample groups, but also with respect to geographical sampling, since most were done in the northeastern (1–5) and western United States (6, 7), areas insufficient to yield good evidence for generalization about drug abuse in other parts of the country.

Only more recently have surveys been conducted among groups in the southern (8) and Rocky Mountain (9) areas of the country. Yet even these later studies, particularly that in Dallas, Tex. (8), may not be comparable to surveys done in the eastern United States due to the different populations sampled, i.e., college students versus junior and senior high school students. With the exception of a military survey conducted in Oklahoma (10), there have been no large-scale surveys published of drug abuse patterns in civilian or military populations in the midwestern and central plains areas of the United States.

Like their civilian counterparts a few years ago, the military is now investigating the drug abuse patterns of its members. There appear to be a number of recent studies of the incidence of drug abuse in the Army (11), although few have thus far been published. In 1969, Black, Owens, and Wolff (10) surveyed a heterogeneous group of 5,482 active-duty men, including trainees, stockade prisoners, and men returning from overseas duty. All had been in the Army a minimum of two months. The researchers found that 27 percent of the sample had used LSD, amphetamines, heroin, and marijuana; however, the inclusion of 434 stockade prisoners may have caused the percentage of drug users to be spuriously high.

Many civilian and military studies either restrict their investigation to only a few parameters or are subject to criticism of their methodology. Some (1, 2, 4) have used a mailed anonymous or coded questionnaire, with a return rate of 55 to 80 percent. This introduces a potential bias in that the nonresponders may have been users and did not wish to risk disclosure. Other studies have limited their drug abuse questioning to a particular race (12, 13), have been concerned with only one to three drugs (7, 9, 14), or have included drugs such as paregoric and nonprescription cold and cough medicines, all of which may normally be used by the population surveyed (8).

In addition to the concern for sample population age, type, and geographical location, another factor of importance in drug abuse surveys is time. As a result of sometimes rapidly changing attitudes and practices, the incidence of drug abuse can fluctuate, with some drugs enjoying more "popularity" at one period than at another. Drug abuse seemed to accelerate in the mid 1960s and perhaps leveled off in 1969 (5). Surveys need to be periodically repeated in order to get up-to-date figures; as of January 1971, there had been no known publication of the results of large-scale drug abuse surveys conducted after 1969.

With all of the foregoing in mind and with a need to assess the magnitude of the drug abuse problem "inherited" by the military from the civilian population (the military often being maligned as causing or increasing drug abuse in young men), the following study was done.

SUBJECTS

We realized that a drug abuse problem existed in the military, but were unaware of its magnitude and how, or

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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if, the military experience changed the abuse pattern. As a first step we gathered drug abuse data from individuals by means of an anonymous questionnaire given to every new male inductee at a large Army training center in the midwestern United States from January 15, 1971, through June 30, 1971. Although these men were in the Army, they had been in for less than two days, so their responses essentially pertained to their experiences with drug abuse prior to their entrance into the military.

Most of those surveyed came from the midwestern United States. Ninety-eight percent came from induction centers in St. Louis, Mo., Omaha, Neb., Minneapolis, Minn., and Houston, Tex., as well as from centers in Ohio, Oklahoma, Tennessee, and Wisconsin. About two percent came from induction centers in Los Angeles, Calif., Chicago, Ill., San Antonio, Tex., and Little Rock, Ark.

METHOD

The questionnaire consisted of 20 separate questions.[1] The first ten dealt with demographic data—age, race, education, religious practices, marital status, military component (e.g., drafted, enlisted, etc.), family stability and income, and size of home community. The next five questions asked whether any drugs of abuse had been used and, if so, the methods of getting and using them.

The next question, number 16, was concerned with 14 chemicals that might have been used and included data about age at onset of use, number of times used, method of taking drug, and amount of time since last use of each drug. The drugs, listed primarily in alphabetical order, included amphetamines, barbiturates, cocaine, DMT, heroin, hashish, LSD, marijuana, mescaline, morphine, opium, psilocybin, and STP, as well as glue. Because these chemicals might not be known to some individuals by their questionnaire names, a sheet was given to everyone that listed many synonyms and "street names" for each drug on the questionnaire.

Question 17 asked for a "yes" or "no" answer as to whether the person had used a drug not listed on the questionnaire. Question 20 asked if the person had ever had an undesirable or unpleasant effect from drug abuse. Space was provided on the back of the answer sheet for elaboration on "yes" answers to questions 17 and 20.

Question 18 required a "yes" or "no" answer as to whether the person planned to continue to use drugs. Question 19 listed a choice of 12 possible reasons why he had first used a drug.

Testing was done five days a week in groups of 50 to 300 in two adjacent buildings specially designed for testing incoming new military personnel. Except for the fifth month of testing, each man had an individual booth with a desk separated on three sides by partitions high enough to ensure privacy. Due to administrative problems, the fifth month of testing was done with the subjects filling out the forms in open pews.

[1] Copies of the questionnaire are available from the authors.

TABLE 1
Prevalence of Drug Use

Drug Used	Total Number of Users*	Percentage of Total Population** (N=19,948)	Percentage of Drug Users** (N=6,203)
Amphetamines	2,369	11.87	38.19
Barbiturates	1,743	8.73	28.09
Cocaine	751	3.76	12.10
DMT	418	2.09	6.63
Hashish	3,206	16.07	51.68
Heroin	533	2.67	8.59
LSD	1,839	9.21	29.64
Marijuana	4,876	24.44	78.60
Mescaline	1,817	9.10	29.29
Morphine	314	1.57	5.06
Opium	822	4.12	13.25
Psilocybin	547	2.74	8.81
STP	374	1.87	6.02
Glue	801	4.01	12.91

*Numbers total more than total population because of multiple-drug users.
**Percentages total more than 100 percent because of multiple-drug users.

Groups were instructed on the testing procedure by a representative of the post Mental Hygiene Consultation Service, who clearly identified himself as such. It was stressed both verbally and in writing (on the questionnaire) that the subjects were participating in a confidential research study and that their answers would not affect their Army assignment in any way. Emphasis was also placed on the anonymity required, and it was made clear that no identifying marks were to be made on the answer sheet.

By use of a prerecorded tape fed through loudspeakers, each question was then read to the group and necessary clarifications were made. Using a previous pilot trial as a guide, a period of time suitable for answering each question was allowed, after which the tape passed to the next question.

The answer sheets were collected and machine-scored, with the results placed on punch cards, which were then run through a computer for final tabulation. In addition, each answer sheet was manually scanned for handwritten answers on the back concerning other drugs used and undesirable effects from drugs.

A total of 19,948 men were surveyed, and no one refused to complete the questionnaire.

RESULTS

This survey indicated that 6,203 subjects, almost one-third (32 percent) of all men entering the Army from the Midwest in this time period, had used drugs (see table 1). The most frequently used drugs were marijuana and hashish, with respective prevalence rates of 24 percent and 16 percent. Amphetamines were next, followed by LSD, mescaline, and barbiturates. "Harder" drugs occu-

TABLE 2
Drug Use by Demographic Characteristics

Characteristic	Percentage of Total Population	Percentage of Drug Users
Race		
White	84.10	32.30
Negro	7.12	31.50
Spanish-American	3.88	20.10
Indian	0.78	35.89
Other	2.62	18.70
Military Component		
Volunteer	36.40	30.10
Draftee	38.75	28.20
Reserves	8.22	24.08
National Guard	15.68	22.00
No response	0.61	—
Marital status		
Single	73.57	29.60
Married	24.90	20.40
Divorced	1.53	38.56
Population of Area of Origin		
Under 2,500	27.78	17.74
2,500–25,000	33.81	26.23
Over 25,000	37.82	36.06
City	62.56	36.06
Suburb	37.44	36.91
College Education		
1 year	8.01	34.48
2 years	6.71	37.70
3 years	3.38	32.84
4 years (nongraduate)	2.24	35.26
Graduate	9.13	25.62
Family stability		
Lived with both parents until 16 years old	78.19	26.41
Did not live with both parents until 16 years old	20.83	33.02
Parents' income		
Under $4,000	11.55	18.26
$4,000–$7,000	21.30	30.09
$10,000–$13,000	20.59	31.86
Over $13,000	18.49	39.04
No response	29.07	—
Religious affiliation		
Catholic	24.61	29.94
Jew	0.68	39.70
Protestant	40.16	26.81
Other	26.12	25.21
None	7.59	37.28
No response	0.84	—

pied the lower end of the scale, with lower prevalence rates for opium, cocaine, heroin, and morphine. Most subjects had used drugs 15 times or less. Many had taken a drug five times or less; this was true of 47 percent of the cocaine users and 46 percent of the heroin and opium users. In contrast, "softer" drugs were used more frequently; 42 percent of the hashish users had used that compound 15 or more times, compared to 19 percent of the cocaine users, 22 percent of the heroin users, and 15 percent of the opium users. Marijuana was the only drug listed on our sheet that had been used 15 or more times by more than half (53 percent) of its users.

Two-thirds of the respondents stated that a month or more had elapsed since they had used a drug. Only one percent indicated that they had used drugs within two days prior to the survey. Generally, drugs were used in commonly expected ways. Marijuana and opium were smoked by 96 percent and 93 percent of their respective users. Amphetamines were taken orally by 83 percent of their users and injected by 12 percent, while barbiturates were taken orally by 72 percent of their users. Occasionally, unusual methods of use were disclosed, such as three persons who admitted injecting hashish and six percent of the DMT users who admitted injecting that compound.

There was little racial difference between whites and blacks in overall drug use, with whites having a 32-percent usage rate and blacks, 31 percent (table 2). The small sample of Indians had a 35-percent usage rate. However, differences in racial prevalences were noted for each drug used (table 3). Prevalence of marijuana usage totaled 25 percent for white users versus 21 percent for nonwhite users. Hashish usage was 16 percent for whites and 12 percent for nonwhites. LSD prevalence for whites was nine percent and for nonwhites, seven percent. Opium had rates for whites of four percent and for nonwhites, two percent. Barbiturate usage for whites was ten percent and for nonwhites, 18 percent. Amphetamine rates for whites were 12 percent and for nonwhites, 28 percent. Heroin had prevalence rates for whites of two percent and for nonwhites, four percent.

Almost 40 percent of the Jews in the survey indicated that they had used drugs (table 2). Persons professing no religious affiliation were next with 37 percent, and Catholics were third with 29 percent. There were higher rates of drug use in more populous areas, with urban areas having rates of 36 percent compared to 17 percent in rural areas (i.e., populations under 2,500). Rising family income was associated with increasing drug use, with men from families with the highest income (i.e., more than $13,000 per year) having a 39-percent prevalence rate and men from the lowest (less than $4,000 per year), an 18-percent prev-

TABLE 3
*Use of Specific Drugs by Racial Groupings (in Percentages)**

Drug Used	White (N=16,776)	Nonwhite (N=2,870)
Amphetamines	12.24	28.48
Barbiturates	9.90	18.07
Cocaine	3.58	5.22
DMT	2.15	1.94
Hashish	16.80	12.91
Heroin	2.40	4.49
LSD	9.64	7.69
Marijuana	25.64	21.23
Mescaline	9.76	6.12
Morphine	1.54	1.88
Opium	4.42	2.78
Psilocybin	3.03	1.32
STP	1.99	1.35
Glue	3.85	5.39

*Percentages total more than 100 percent because of multiple-drug users.

alence rate. Prevalence of usage for those who started college but did not complete it was 32 to 37 percent, depending upon the year in which they dropped out, whereas graduates had a prevalence rate of 25 percent.

Only a two-percent difference in rates of drug use was noted between volunteers and draftees. The prevalence rate among volunteers was 30 percent and among draftees, 28 percent. Rates among reserves and National Guardsmen were lower, with 24 percent and 22 percent, respectively. With reference to marital status, divorced men displayed the highest prevalence rate (38 percent) and married men, the lowest (20 percent). Persons who had lived with both parents until age 16 had prevalence rates for drug abuse of 25 percent, versus 33 percent for those who had not.

Age at onset of drug use was generally in the late teens, but some subjects had started sniffing glue at an earlier age, with a mean of 14 years (table 4). Apart from glue sniffing, 14 years was the earliest age of onset for any other drug used. Subjects had first used amphetamines and the hallucinogens DMT and psilocybin as early as age 14; barbiturates, heroin, LSD, marijuana, and STP as early as age 15; and cocaine, morphine, and opium at 18 years. The youngest mean age of onset for use of any chemical other than glue was 17 years, for both LSD and STP. Mean age of onset for marijuana use was 18.1 years.

Reasons given for drug use were mainly curiosity (41 percent) and to get a high (29 percent). Seven percent listed going along with friends as their reason for drug use. Almost all users (99 percent) indicated that they were first introduced to drugs by friends. Two percent stated that they had used drugs other than those listed. Five percent stated that they had suffered undesirable effects from drugs. The results of the responses concerning side effects and other drugs used will be dealt with in a later article.

TABLE 4

Average Age and Range of First Use of Specific Drugs

Drug Used	Age (Years)	
	Average	Range
Amphetamines	17.1	14–23
Barbiturates	17.6	15–22
Cocaine	19.0	18–23
DMT	19.0	14–20
Heroin	18.5	15–23
Hashish	18.0	16–24
LSD	17.0	15–23
Marijuana	18.1	15–23
Mescaline	18.4	17–25
Morphine	18.7	18–22
Opium	18.3	18–20
Psilocybin	18.8	14–20
STP	17.0	15–21
Glue	14.6	11–19

DISCUSSION

Although this survey was conducted in a military setting, it in fact involves a young male civilian population. All respondents had been in the Army two days or less when surveyed. Prevalence rates varied considerably each month, fluctuating from 25 percent to 34 percent. In the fifth month, procedures were altered and the subjects did not have complete privacy during completion of questionnaires. During this month the prevalence rate dropped to 25 percent. In the sixth and final month, original testing procedures were resumed, and prevalence rates rose to 32 percent. This would seem to indicate that privacy of respondents is an important factor in obtaining valid responses to drug abuse surveys.

Most of the persons admitting drug use appeared to be casual users or experimenters. This was supported by the facts that: 1) few had used any particular drug more than five times, 2) 97 percent stated that they did not plan to continue using drugs, 3) 79 percent used drugs in a social or group setting, and 4) more than half (57 percent) did not pay for the drugs they used. In addition, relatively few used the more pathological intravenous method, even for heroin. Less than half of the heroin users and less than one-third of the morphine abusers injected these respective compounds. But our survey did reveal a small core of confirmed drug users. Fifteen to 20 percent of the drug users indicated that they had used hard drugs 15 times or more and two percent of the drug users indicated that they planned to continue using drugs. Unfortunately, computer time was not available to delineate the demographic characteristics of these people.

Very few subjects indicated that they had used drugs in the week prior to testing. This may have been due to the unavailability of drugs during the transition period between home and the Army, fear of being apprehended in a new situation, or having experimented and discontinued drug use. If urine tests for the presence of drugs are unreliable two or three days following last drug use, then reception station testing would have the potential of detecting only one percent of all drug users coming into the military. Thus reception station urine testing appears to be an ineffectual detection procedure for drug users.

Admission of unusual methods of drug use, such as injecting glue (two persons) or hashish (three persons), indicates a reckless disregard for personal safety and demonstrates an ignorance of the deleterious effects of the various methods of drug intake, or it could simply indicate an error in questionnaire completion. However, clinical experience has revealed that sometimes individuals do inject these substances intravenously.

Racial differences were most notable for types of drugs used rather than for total drug use. There were great racial differences in the sample, with whites comprising 84 percent of the population and blacks, seven percent. For ease of comparison the total nonwhite population was compared with the white population. Nonwhites' use of amphetamines, barbiturates, and heroin was twice that of the whites, while cocaine had a three-percent prevalence

rate among whites and a five-percent rate among nonwhites. In contrast, whites tended more toward the use of marijuana, hashish, and hallucinogens.

The largest religious group, Protestants, had the lowest prevalence rate (26 percent), whereas the smallest religious group, Jews, had the highest rate (39 percent).

Higher drug use in more populous areas may indicate greater accessibility of drugs in urban areas, while rising use with higher incomes might mean that more money is available for self-indulgence, including drug use. However, most drug users in our population did not pay for their drugs, so higher family income may not have had a direct causal relationship with increased drug use. Lower prevalence rates among college graduates may indicate greater ego strength, personality stability, and self-control in persons who graduate, as opposed to those who do not. Marital and family stability appear to influence drug use, with unstable marital and family situations being associated with a higher prevalence of drug use.

There was a wide age range (11 to 25 years) for the onset of drug use, but most users had started when they were 17 or 18. Glue sniffing was the earliest form of drug abuse, and the average age for onset of use was 14 years, the youngest mean age for starting any drug. We would like to be able to say that our figures concerning average age of onset indicate that drug abuse is not creeping into junior high schools and grade schools as has been recently feared. However, our respondents were in junior high school at least four to five years ago, making such a statement invalid.

One of the startling findings of the study is that 99 percent of the users indicated that they were first introduced to drugs by friends. What portion of these friends were also pushers is not known, but it probably was small. Also, seven percent of the users indicated that they had first used drugs to go along with their friends. These figures reinforce the concept of the importance of peer relationships in drug abuse, as opposed to what adults and other authority figures may say. This indicates that drug abuse education programs with small group discussions may be more effective than lectures by an "expert" adult.

Ninety-seven percent of the users indicated that they did not plan to continue drug use. If this is true, it is encouraging and may reflect either unpleasant effects or disappointment in the actual drug effects. Since only five percent of our respondents admitted having unpleasant effects, the latter may be more likely. However, there does remain the possibility that despite assurances to the contrary, these men may have feared being identified and watched if they admitted their intentions of further drug use.

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Steps in the Return to School of Children with School Phobia

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Although a variety of methods for the treatment of school phobia has been proposed in the literature, most writers agree that returning the child to school as soon as possible is of primary importance. The authors discuss eight steps that they have found to be successful in helping the child return to school and helping his parents to keep him there. Case reports that illustrate the application of these steps in practice are also presented.

CHILDREN WITH SCHOOL PHOBIA present a difficult problem that is very upsetting to the child, his family, the community, and the therapist. Suddenly, for little or no apparent reason, the child refuses to go to school. He insists on staying home and may complain of aches and pains. When his parents urge him to go to school, he may cry, perspire, become pale, and show other signs of severe panic that are relieved only when his parents finally allow him to stay home. The longer he stays home, the harder it becomes to send him to school, and he soon develops "school phobia."

A great deal has been written about school phobia, and many views have been expressed about the dynamics and treatment of the problem. The most thorough reviews of the literature with extensive bibliographies are those of Esther Marine (1–3) and Kahn and Nursten (4, 5). In spite of the great divergency of opinion, most authors agree that the child's early return to school is of prime importance, and the focus in this paper is on the appropriate steps before, during, and after returning the child to school (6–18). While most therapists probably use these steps to some extent, we feel that it is relevant to look at them more specifically, to relate them to the casual mention of their use in the literature, and to draw on our own experiences for particular illustrations.

SCHOOL PHOBIA

The term "school phobia" needs to be differentiated from truancy and simple school withdrawal. A "truant" is a child who is absent from school without either his parents' or the school's permission. Other children may be kept home for some reason by the parents, and this may be termed "school withdrawal." Both problems are social in nature. The child with school phobia, on the other hand, may *want* to go to school but *cannot* and becomes acutely anxious even at the thought of leaving home. To some extent, "school phobia" is a misleading term, in that it is usually symptomatic of another problem—the tie between parents and child and the resulting conflicts (4).

Most authors suggest that the basic difficulty is a mutual hostile-dependent relationship between mother and child or, much less frequently, between father and child (7–9, 19–25). While the parents overtly urge the child to go to school, they give nonverbal cues interpreted by the child as suggesting that he stay home (6–9, 21, 26–31). When these children are in school, they frequently fear that death or injury will occur to a family member, most likely as a result of their fear that their hostile wishes might come true (8, 9, 13, 15, 16, 23–25, 27, 29, 32–37). The child feels an urgent need to go home, then, to make sure that his "beloved one" is still alive and well. Frequently, there is a precipitating event, such as a death or illness in the family, or the child's own illness (8, 9, 11, 16, 21–23, 38, 39). After this acute precipitating event has passed, the child will then refuse to return to school.

RETURNING THE CHILD TO SCHOOL

The treatment of school phobia has caused considerable controversy in the literature, with approaches ranging from psychoanalytic therapy (11, 32) and "analytic first aid" (15) to child guidance approaches, conditioning (33), and other rapid treatment methods (10). An early controversy dealt with how quickly to return the child to school; although there are still some authors who feel that an early return to school may interfere with intensive therapy (24, 40), most authors cited in this paper believe that rapid return to school is essential, though they may differ over the method of therapy to be used after the child has been returned to school. Our own experience confirms this belief.

There are several reasons for returning the child quickly. The children who do go back seem to improve rapidly, while those who remain at home become increasingly anxious, so that it becomes more and more difficult to return them to school at a later date. Since a large part of the problem seems to be the mother's difficulty in letting the child go, the successful experience of his being back in school permits both the parent and the child to function in a more usual way; if anxiety continues to be a problem, it can be dealt with in psychotherapy.

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How can early return to school be accomplished? In our work, we have found that several steps are necessary which must be initiated as quickly as possible. These steps are set forth below, along with illustrative case reports.

Step I: Physical Examination

Obviously, if the child has a real physical illness that keeps him out of school, lack of attendance cannot be called "school phobia." The first step, then, in dealing with a child who is staying home because of physical complaints is to determine whether there is an organic basis for his condition. It should be kept in mind, however, that physical symptoms, mostly minor and chronic, such as headaches, gastrointestinal upsets, or mild respiratory symptoms, may be used by the child and his family as an excuse to keep him out of school, thus masking a real school phobia.

Step II: Psychiatric Evaluation

The next step is to rule out an incipient psychosis or other serious pathology, since school avoidance in such cases is usually seen as a secondary symptom rather than as a primary problem. The therapist should conduct an interview with parents and child and then determine the seriousness of the difficulties.

Case 1. Charles was hospitalized at age 13 for "chest pains" but was discharged soon after when examination revealed no organic cause for his complaints. Four months later he was brought to the Child Psychiatry Clinic because he had refused to return to school after his discharge. Charles was spending most of this time in his room, though he slept very little and had frightening nightmares; he was also fearful of members of other races and nationalities and fantasied attacks both upon them and upon members of his family. Charles was anxious, had delusions of grandeur and persecution, and had tenuous reality testing. School avoidance was thus a symptom of psychotic decompensation; immediate hospitalization was recommended.

The second purpose of the diagnostic interview with the child and his parents is to determine the individual and family dynamics involved and the precipitating event that resulted in school phobia. While certain relationships and problems might be expected, they are not always present in every case and, even when found, their expression can vary widely.

Case 2. Randy, a six-and-a-half-year-old black boy, was referred to the clinic after he had been out of school for nearly a year. When he first started kindergarten, he cried and the teacher suggested that he stay home until the following year. The next September, he had a successful first day at school, but on the second day he was hit by a car and suffered a broken leg. After being in the hospital in traction for three weeks and at home in a hip spica cast for seven weeks, he had sufficiently recovered to return to school, but he refused.

Randy came from a severely disorganized ghetto family. He was the eighth of 11 children, and his parents were divorced when he was three and a half years old. His maternal grandmother, to whom his mother was very close, had died when his mother was pregnant with Randy. The mother herself had a history of depression and suicidal attempts. Her tenth child was born two months before Randy was to start first grade, and she was pregnant with her 11th at the time of the interview. Randy's older sister, who had taken a mothering role toward him, had also been pregnant at the time he started kindergarten.

While Randy was not able to verbalize his problems easily, his play fully revealed his concerns. While in the hospital he had been quite lonely, and he was still angry that his mother had not visited him. He knew that his mother was expecting another child and feared that he would again be left alone. Past desertions—by his father, by his mother during other pregnancies, by his sister during hers—all contributed to his anger and his fear of being abandoned once again. The anger could not be expressed, however, since he still needed his mother, and it is likely that he felt that he must stay home to make sure that his mother had not been destroyed by the destructive fantasies he had about her. Randy was still concerned about the injury to his leg, with unresolved castration fears.

Randy's mother was overwhelmed by her own problems and those of her family. Though she was irritated by Randy's demands and clinging behavior, she also worried about him and "loved" him while he was ill and at home. It may be that he was a "special" child to her, since she was pregnant with him when her own mother had died and he had provided comfort to her then; but at the same time, she may have had strong feelings of rejection for him. Whatever the reason, her dependence upon him and her communication of these concerns to him did not promote his easy return to school.

Step III: Finding a Therapeutic Ally

One of the most important steps in returning the phobic child to school is to find one or more persons who can function as a source of strength. This can be someone in the family or someone outside—a teacher, a minister, or even a family friend. This person acts as a kind of aide to the therapist—someone who is more often present and more available to the family on a day-to-day basis, and who can act both as an agent of external control and as a support to parents and child.

Case 3. In the case of Sally, an eight-year-old girl, the family physician provided the extra support that was needed to get her back in school. It was he who had initially referred her to the clinic, since his own examinations and those of several other physicians indicated that there was no physical basis for the child's complaints, and it was his insistence that finally brought the family to the clinic. Sally's complaints of headaches and nightmares began when the family had moved just before school started; this had been the fifth such move in five years, and Sally had recently asked when the family would be moving again. Her mother had been hospitalized four times since Sally was born; the last hospitalization, for a hysterectomy, occurred when Sally was six and precipitated a depression in the mother that she "hid" from the children. Sally had one older sister who was said to be "bad," but who received more of the parents' approval since they prized her independent behavior.

Assessment of the case was made in close collaboration with the referring physician, who then informed Sally's mother of the findings. She put up immediate resistance to accepting Sally's problems as being emotional, indicating that Sally had had a reaction to a penicillin shot, which had kept her home for two weeks, but the doctor assured her that the "reaction" was simply the result of Sally's hyperventilation. He reiterated that he had found no physical problems in his examination and told the mother that she could best help the girl by standing firm and insisting that Sally go to school.

Although the mother agreed to the plan, the doctor felt she

was not convinced; but when the social worker checked with the mother a few days later, Sally was in school. The mother admitted that forcing a "sick" child to go to school made her feel guilty, but she was determined to follow her doctor's advice and to keep Sally in class. She asked for help in finding a local agency that would provide therapy for the girl, but later, when she was recontacted, the mother indicated that the family had not followed up on the referral since Sally was still in school and things were going well.

Step IV: The Interpretive Interview

Once the therapist has established that the child is not physically ill or seriously disturbed, has some understanding of the dynamics of the case, and has identified someone who can provide extra support, an interpretive interview is needed to discuss the problems with the family and to set up the expectation that the child can return to school immediately. The therapist should confirm that nothing is physically wrong with the child and indicate that the child is truant unless he goes back to school at once. He should show his willingness to help the family and child find ways to make his return to school easier. If the precipitating cause is obvious, it should be discussed, and fears ("Will I be a bad mother if I make him go to school?") should be dealt with sympathetically. The therapist should be understanding but firm in his resolution that the child return to school, suggesting that the only alternatives are a truancy petition or hospitalization in a psychiatric unit that has classroom facilities. A mild tranquilizer may be prescribed for a few days to alleviate some of the renewed anxiety over the return to school.

Step V: Planning

The therapist, the family, and the school should draw up plans for returning the child to class and set a date in the near future. If at all possible, a face-to-face meeting should be held so that a plan can be worked out among all those involved. In some cases, it may seem advisable to return the child gradually, through a kind of "deconditioning" process, letting him return home after part of the day or permitting him to retire to the principal's office from time to time. In other cases, a complete return may be desirable so that the child has no "outs."

Case 4. The school not only took an active part in planning the return of Jenny, age nine, but was also a source of strength for the family. Just before a minor illness that kept her out of school, Jenny's grades had begun to drop, and later, looking back, the parents realized that the change occurred after her father lost a finger in an accident at work. Jenny began to complain of sore throats and was even hospitalized with tonsillitis; she could not return to school. A crisis was reached two months later when Jenny set two fires within two days.

At the interpretive interview with the parents, it was suggested that Jenny be returned to school immediately, the next day if at all possible. The mother's ambivalent feelings came out at once—she did not want to be a "bad mother" by sending a sick child to school, nor did she want her daughter to miss so much school. With support, she was able to get Jenny off to school the following morning, but Jenny used one of her previous symptoms to foil the plan. She vomited and was sent home. Again the mother, teacher, and principal were contacted, and it was agreed that Jenny would stay in school, even if she did vomit. Jenny tried to find a way home again and was successful: she vomited down the front of her dress. At last, when a final plan of sending extra changes of clothes to school was worked out, Jenny settled down and did not remain out of school any longer.

Step VI: Support

Jenny's case and some of the others discussed show the importance of the therapist's continuing involvement in guiding and supporting the family as it made the critical adjustment of returning the child to school. Phone calls were made, office visits were arranged, and, in some cases, home and school visits were necessary. Sometimes drug therapy was necessary, usually for a limited time. Whatever the need, the therapist should make himself available so that he can provide the help and support that both parents and child need to make the return to school successful.

Step VII: Follow-Up

At the time that the child returns to school (successfully, one hopes) he, his parents, and the school should understand that the therapist will be checking at regular intervals to determine his progress. To the family, this says that the therapist is interested and still available; to the school, it indicates the therapist's willingness to continue to be involved and to provide consultation whenever the teacher or principal needs it. In the cases described here, some contact has been maintained; at last report, all the children except Randy were still in school and coping acequately.

Step VIII: Psychotherapy

Ideally, follow-up would be only one aspect of a total therapeutic plan but, although psychotherapy was offered all the families mentioned above, none accepted. Once the child was back in class and free of overt physical symptoms, the overall anxiety level was apparently reduced enough that further therapy was rejected. Although we have little information concerning the later development and adjustment of the children, neither they nor their siblings have returned to the clinic with the same or other symptoms.

DISCUSSION

School phobia frequently appears as a symptom in response to a subtle, often ambivalent, message from the mother or another family member that life is insecure and the child had better stay at home. Staying at home then leads to a vicious circle of withdrawal from the growth-promoting stimulation of learning and peer relations. further regression and withdrawal, increasing embroilment in a hostile-dependent relationship with parents, more intense anxiety, and more extreme school rejection.

At the same time, in moments of healthier ego functioning, both parents and child know that the child should be in school and, at some point, they reach out for help. If

he acts quickly, the therapist can strengthen this functioning through his own authoritative support and the temporary reliance on family members, school personnel, or someone else outside the family in order to work out a plan for the child's immediate return to school. Then, with some of the anxiety of both parents and child relieved, and the message clearly stated that the child must return to school, he can usually go back to class. Once there, the child can use the accomplishment for further growth and the symptoms usually do not reappear (12).

Although the return to school puts an end to the secondary gain of staying at home and induces growth, it does not solve the family's basic problems, for which further therapy may be needed. Unfortunately, in the cases described here, the families were not ready for treatment. It could be argued that they might have been better motivated for further treatment if they had been denied relief of the symptom, but this would be risky since school phobia itself is so crippling and becomes harder to treat the longer the child's return to school is put off.

CONCLUSIONS

This paper has focused on the specific steps we have found useful in returning the school-phobic child to school as soon as possible. The first step is to rule out any organic reasons for the symptoms through a physical examination and then to determine the dynamics of the situation through a psychiatric examination. Next the therapist should search for a therapeutic ally, someone who can support the family on a day-to-day basis through the period of crisis. With these steps accomplished, an interpretive interview can be held with the family and the expectation should be set up that the child can return to school immediately. A plan is devised in cooperation with school personnel and, during the critical first days after the child's return, frequent support is given by the therapist. Follow-up contact is made and, if possible, the family is involved in psychotherapy.

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The Effects of Regressive ECT with Process Schizophrenics

BY LUIS G. MURILLO, M.D., AND JOHN E. EXNER, JR., PH.D.

An experimental group of 32 process schizophrenics was treated with regressive ECT, while a control group of 21 patients was treated with ataraxic drugs and psychotherapy. All patients were evaluated at admission and at or after discharge, using four sources of evaluation: self-ratings, psychological tests, relatives' ratings, and ratings by referring therapists. Statistical analysis of 55 variables indicated that the two groups were essentially equivalent at admission but showed significant differences on 28 of the 55 variables after discharge. All of the variables favored the experimental group treated with regressive ECT.

MAY (1) STUDIED 228 schizophrenics randomly assigned to five treatment groups. All were first admissions to a state hospital. He concluded that the administration of ataraxic drugs alone is generally the treatment of choice for the schizophrenic whose pretreatment prognosis is average or poorer. He also found that ECT is not a desirable alternative to drugs or drugs plus psychotherapy. The patients in May's ECT treatment group were treated by the conventional method. Unfortunately, studies using experimental variations of ECT have been limited, particularly as chemotherapy has gained wide use.

Regressive ECT is an experimental variation that employs more frequent treatments than is the case with conventional methods. It has been variously described as "intensive ECT" (2) and as "depatterning" when combined with sleep therapy (3, 4). Its effectiveness is not so much based on the increased frequency of treatments as on the occurrence of a "clinical" regression, which may occur after only a few treatments or may require many. The regression is marked by a state of helplessness, apathy, confusion, memory loss, speech alterations, and gross disorientation. Neurological signs of alteration in cerebral activity are evident near the end of treatment. Recovery from this state usually takes from seven to ten days. Improvement, if it occurs, is marked during this period.

Glueck, Reiss, and Bernard (5) reported the five-year follow-up of 100 patients treated by regressive ECT. They found that patients showed significant improvement, which often continued throughout the follow-up period; they could discern no serious medical complications or evidence of cerebral damage. Unfortunately, the reports concerning the effectiveness of regressive ECT have not been based on controlled investigation. For this reason, and in view of the encouraging observations on the use of this method at Stony Lodge Hospital, where the routine is to administer treatment twice daily seven days a week until regression occurs, it seemed important to conduct a controlled study to determine its merits.

The hypothesis underlying this research is that, given two groups essentially equivalent in demographic and psychological features, including severity of illness, a group treated by regressive ECT will improve as much as or more than a group treated with ataraxic drugs plus psychotherapy.

METHOD

It seemed essential to include only patients whose prognosis would ordinarily be judged as average or poorer. The criteria for "process" schizophrenia seemed most appropriate in this context (6). All patients included in the study had a poor premorbid history, chronic disorganization and detachment, and a long history of chaotic and unpredictable behavior. By no criterion applied would they be described as "reactive" schizophrenics nor would they carry a favorable prognosis.

A simple randomization design was planned but had to be abandoned because nearly half of the patients who met the selection criteria and were recommended by the admission board for regressive ECT could not be treated by this method because of the family's opposition or because physical conditions contraindicated its use. Since the hospital is not large (60 beds), it was decided to use patients recommended for but not receiving regressive ECT as controls, provided they met the criteria for process schizophrenia.

Four independent sources of evaluation were used to control for bias: 1) the patient himself, 2) two psychological tests, 3) the patient's referring therapist, and 4) the patient's closest available relative. None of the evaluators, including the patients, were aware of the purpose of the study. Further, to ensure naïveté, evaluations were collected for all patients entering the hospital between June 1970 and April 1971, even though more than half were not subjects in the study.

A total of 158 patients with various disorders were admitted during this period. Fifty-three of the 158 met the criteria for process schizophrenia and were also recom-

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mended for regressive ECT by the admission board.[1] Thirty-two of the 53 (11 men and 21 women) were treated by regressive ECT; they constituted the experimental group. The remaining 21 (11 men and ten women) were treated with drugs plus psychotherapy; they constituted the control group.

Patient evaluations were collected at admission and again at discharge or seven to nine weeks thereafter. At admission each patient completed the Katz Adjustment Scale Form S (KAS-S), which yields scores for six variables (7): symptoms, performance of and satisfaction with social behaviors, expectation of social activities, and performance of and satisfaction with free-time activities. We also administered the Minnesota Multiphasic Personality Inventory (MMPI) (8), from which 16 scales were analyzed,[2] and the Self-Focus Sentence Completion (SFSC), which provides four scores relating to egocentricity (9). An EEG was also taken.

At the same time, the closest available relative completed the Katz Adjustment Scale Form R (KAS-R), which provides 13 measures of symptoms and social behaviors along with five additional scores concerning the evaluation of, expectation for, and satisfaction with the patient's performance of social and free-time behaviors (7). KAS-R items are written in everyday language and can be used easily by the lay reporter.

The referring therapist completed an Inpatient Multidimensional Psychiatric Scale (IMPS), which was selected because of the ease with which it can be used by professionals after routine observation (10). It yields scores for ten factors ranging from excitation, hostility, and paranoia to cognitive, perceptual, and motor processes, as well as a composite score for schizophrenic disorganization.

At discharge the MMPI and SFSC were administered again and a second EEG was taken.[3] Seven to nine weeks after discharge the former patient again completed the KAS-S and the relative who had rated him at admission again completed the KAS-R. The referring therapist was contacted to determine whether the patient had returned to him for aftercare and, when this was the case, the therapist again completed an IMPS.

RESULTS

A statistical analysis of the demographic data showed no significant difference between the groups regarding age, marital status, education, length of hospitalization, number of individual and group therapy sessions, and incidence of prior hospitalization. The average patient in each group was in his 30s, had some college experience, had spent about 15 weeks in the hospital, and received about 25 individual and 21 group therapy sessions. About two-thirds of the patients in each group were married and about half had been previously hospitalized. The regressive ECT patients averaged 26.3 treatments, with a range of six to 58 treatments before "clinical" regression occurred.

The data from the four sources of evaluation—self-reports, psychological tests, relatives' reports, and therapists' reports—were each analyzed separately, using an analysis of variance for repeated measures; all analyses yielded f ratios that were statistically significant beyond $p < .01$. Subsequently, t tests were performed to further identify specific areas of significance in the data from each source. Both within-group and between-group analyses were performed. A total of 55 variables was studied.

Table 1 shows the frequency of statistically significant differences between the groups at admission and discharge or post discharge for each of the four sources of evaluation. It also includes the number of variables that changed significantly within each group from the first to the second evaluation. At admission, the groups differed on only four of the 55 variables, all from the relatives' reports. The regressive ECT group was rated as more confused and bizarre in behavior, while the control group was rated as more negative and functioning less satisfactorily in free-time behaviors. At discharge and post discharge the groups differed substantially. A statistically significant difference occurred between the groups for 28 of the 55 variables, all of which favored the ECT group. Further, the ECT group manifested significant change on 42 of the 55 variables (76 percent) from the first to the second evaluation, while the control group changed significantly on ten of the 55 variables (18 percent). It seems important to emphasize that significant changes occurred between the groups in the evaluations of all four sources.

Self-Reports

The groups were essentially the same at admission, but differed significantly on two variables after discharge. The ECT patients reported fewer symptoms and a more favorable performance of social behaviors. They were also more satisfied with this performance. The control group was essentially unchanged, except that they too were more satisfied with their performance of social behaviors. In an effort to clarify the self-reported data each former patient was asked to rate his post-discharge adjustment on a five-point scale. The results are shown in table 2.

Psychological Tests

At admission both groups showed very high SFSC scores for self-focus (egocentricity) and low scores in external world focus. At discharge the control group was essentially unchanged, except for giving fewer ambivalent

[1] In all, 77 of the 158 patients were recommended for regressive ECT by the admission board; however, 24 either did not meet the selection criteria for process schizophrenia or left the hospital against medical advice before treatment was initiated.

[2] The 16 scales analyzed from the MMPI were the three validity scales (lie, frequency, and correction), the nine clinical scales (hypochondriasis, depression, hysteria, psychopathy, masculinity-femininity, paranoia, psychasthenia, schizophrenia, and hypomania), and four nonclinical scales (social introversion-extroversion, ego strength, general maladjustment, and anxiety).

[3] EEGs were also taken from the regressive ECT group 12 to 15 days after their treatments were terminated.

TABLE 1
Summary of Statistically Significant Differences Within and Between Groups

Source	Number of Patients		Number of Variables	Significant Differences Between Groups		Number of Variables Significantly Changed	
	Experimental Group	Control Group		Admission	Discharge or Post Discharge	Experimental Group	Control Group
Self-reports	32	21					
KAS-S			6	0	2	3	1
Psychological tests	32	21					
MMPI			16	0	8	13	0
SFSC			4	0	3	3	1
Relatives' reports	27	18					
KAS-R			18	4*	7	13	4
Referring therapists' reports	22	15					
IMPS			11	0	8	10	4
Total			55	4	28**	42	10

*Two of these favored the experimental group and two favored the control group.
**All favored the experimental group.

responses. The ECT group showed a significant reduction in self-focus scores and a significant increase in external world focus scores, along with a corresponding reduction in ambivalent scores.

On the MMPI the groups were extremely similar at admission, manifesting pathologically high scores for eight of the 16 scales studied: depression, hypochondriasis, psychopathy, paranoia, psychasthenia, schizophrenia, hypomania, and general maladjustment. At discharge, the control group had not changed significantly, while the ECT group manifested significant change on 13 of the 16 scales and differed from the controls on eight of the scales, including seven of the nine basic clinical scales. At discharge none of the scores from the ECT group fell in the pathological range (8, 11).

Relatives' Reports

Though they differed only slightly at admission, the relatives' ratings differed markedly after discharge. The ECT group was rated as significantly less suspicious, anxious, and hyperactive and as showing fewer signs of general psychopathology than controls. The ECT group manifested significantly more stability and performed more favorably in both social and free-time activities. The post-discharge KAS-R report profiles were also compared, by group, with relatives' ratings of 133 day-care psychiatric patients, a second group of 51 discharged state hospital patients who showed no relapse after one year, and a third group of 450 nonpsychiatric subjects. The ECT group's profile generally fell between those of the day-care and nonrelapsed groups, while the control group's profile was very similar to that of the day-care sample.

Therapists' Reports

The evaluations of the referring therapists were the smallest in number of the four sources of evaluation. Not all patients in either group were rated by referring therapists and not all returned to the referring therapist for aftercare. The data derived from these evaluations were consistent with the data obtained from the other sources. At admission the groups did not differ on any of the 11 variables on the IMPS. After discharge, the groups differed significantly on eight of the 11, all of which favored the ECT group. The control group scored significantly higher in excitation, paranoia, perceptual disorganization, retardation, and motor disorganization, and showed increased hostility, grandiosity, and cognitive disorganization. In effect, the referring therapists rated the control group after discharge as essentially unchanged or worse.

EEG Evaluations

One of two consulting neurologists reviewed the admission and discharge EEGs. The neurologists also did blind ratings of EEGs of the ECT group taken 12 to 15 days after treatment was terminated. They judged all 53 admission and discharge protocols to be within normal limits. They noted abnormal alterations in delta activity in the EEGs of the ECT group taken shortly after treatment.

TABLE 2
Patients' Ratings of Their Adjustment After Discharge

Adjustment	Experimental Group	Control Group
Improved considerably	14	4
Improved slightly	11	6
Unchanged	5	3
Slightly worse than before	1	5
Considerably worse than before	1	3

DISCUSSION

The data presented appear to confirm the basic hypothesis of the study, that is, that the group treated by regressive ECT would improve as much as or more than the group treated by drugs plus psychotherapy. Both groups showed improvement, but the ECT group apparently showed the greater gains. The discharge and post-discharge evaluations showed the ECT group had relatively inconsequential symptomatology or behaviors commonly associated with severe disturbance.

Close examination of the results provides some clues about the symptomatic and behavioral differences between the groups at and after discharge. The discharge evaluation was derived from two psychological tests. On one, the SFSC, the ECT patients were considerably less egocentric and considerably more outer-world-oriented, while the control group remained highly self-centered. On the second test, the MMPI, the ECT patients showed profiles that were essentially free of the high T scores commonly associated with severe disturbance, while the profiles of the controls remained generally high for hypochondriasis, paranoia, hysteria, and hypomania and particularly high for depression. These data can be interpreted to suggest that, at discharge, the ECT patients were more concerned with affective control and social competency, whereas the control group were angrier and more preoccupied with themselves, especially with their health, and had become more interpersonally distant, with fewer affective controls.

The evaluations from the three sources taken seven to nine weeks after discharge appear to support this interpretation. The self-reports indicated that ECT patients had fewer symptoms and were performing more social behaviors. The relatives' reports, which are possibly the least amenable to the influence of any bias, described patients in the regressive ECT group as having fewer symptoms, being less anxious, and using free time more effectively. Conversely, the controls were rated as more suspicious, less stable, and more anxious than desired, and as functioning less effectively in social and free-time behaviors. The evaluations of the referring therapists provide added confirmation. They rated the ECT patients as substantially improved on nearly all of the variables measured by the IMPS. The controls however, while improving moderately for some variables, showed a paradoxical increase in hostility, motor disorganization, and cognitive dysfunction.

On the basis of these findings it seems reasonable to speculate that the major behavioral differences between the two groups at and after discharge occurred in two broad areas: social interaction and control of affect, especially negative affect. All sources of evaluation, including the patients themselves, reported that the controls, as a group, did not make the more socially desired responses to the same extent as did the ECT patients. They were apparently still uneasy in interpersonal situations, possibly as a function of their concern with their health. That phenomenon may have generated the perceived symptoms of paranoia, irritability, and anger or depression. The regressive ECT patients appeared to have somehow learned to cope more effectively with their emotions. They interacted in social situations in a less anxious, more profitable manner. It would be unrealistic to suggest that they are completely "normal" but the data do support the contention that they are considerably different from other groups of schizophrenics and more similar to non-psychiatric groups.

It is impractical to speculate about the causes for these changes since there are few "hard" data on ECT. Cameron (3) has suggested that the amnesic effect is crucial to improvement. Ottosson, among others, has indicated that producing a convulsion is necessary to obtain the desired effect (12). Obviously, the frequency of occurrence of convulsions in regressive ECT plays some role. Kalinowsky (13) has summarized the problem of understanding ECT quite well with his reminder that no theory of ECT has been developed that is sufficiently comprehensive to be taken seriously.

Finally, there are some important cautions that should be included here. The first concerns the experimental design of our study. Pure randomization was not used. The controls, although they met the selection criteria and were recommended for regressive ECT, were not selected randomly but by such factors as the family's unwillingness to approve ECT or, in a few instances, precluding physical factors. Thus, even though the two groups appeared to be highly similar at admission, it is possible that they were somehow different. We hope that the use of external evaluations by naïve evaluators provided an adequate control for this flaw. Secondly, it is difficult to identify the extent to which treatment afforded the control group truly approximated the model used by May (1). In this context it is important to emphasize that the patients were all treated in the same environment thereby limiting the extent to which findings might be generalized. Lastly, but possibly most importantly, the period of follow-up was not very long. While the results two months after discharge were encouraging, data from at least one year after discharge would be more reassuring. A study to obtain such data is currently under way and only after those data have been analyzed can more definitive statements be made concerning the effects of regressive ECT with schizophrenics.

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Questions of the Month

For each of the incomplete statements or questions below, ONE or MORE of the completions or answers given is correct. Choose:

A if only *1, 2, and 3* are correct,
B if only *1 and 3* are correct,
C if only *2 and 4* are correct,
D if only *4* is correct,
E. if *all* are correct.

Question 1

A psychiatric disorder is likely to be associated with which of the following?
(1) Systemic lupus erythematosis
(2) Acute intermittent porphyria
(3) Carcinoma of the pancreas
(4) Huntington's chorea

Question 2

Genetic disorders due to abnormal carbohydrate metabolism include
(1) amaurotic idiocy.
(2) gargoylism.
(3) xanthomatosis.
(4) galactosemia.

(The Questions of the Month are from the Self-Assessment Program of the APA. The answers are supplied on page 277 of this issue.)

The Psychological Evaluation of Patients for a Kidney Transplant and Hemodialysis Program

BY ROGER P. GREENBERG, PH.D., GARY DAVIS, PH.D., AND RONALD MASSEY, PH.D.

Psychological evaluations over a three-year period of 24 patients with kidney disease revealed very little evidence of gross emotional maladjustment. Most of the patients did seem to have experienced organic losses in intellectual functioning and they appeared to have limited amounts of energy available for coping with stress and limited affective responsivity. The authors emphasize the benefits of properly preparing such patients for psychological testing in order to allay their fears, increase their tolerance to stress, and aid in obtaining the best possible picture of their strengths and capabilities.

IN RECENT YEARS there has been a good deal written about candidates for hemodialysis and kidney transplant programs (1–5). As the programs have expanded and progressed, it has become increasingly obvious that these patients are subject to tremendous psychological stresses and require major expenditures of psychic energy in order to adapt to the strains of illness and the necessary medical procedures.

The clinical psychologist has come to play an important role in helping to evaluate the patients' level of functioning and ego resources for successful adaptation to an extremely demanding life situation. In addition, psychologists and psychiatrists have tried to help the medical team anticipate psychological problems and to devise approaches for particular patients. The ability of psychologists to significantly predict patients' future adjustment to such programs has been documented by Sand, Livingston, and Wright (6). Such predictions are particularly useful because of the current scarcity of treatment facilities, which entails selection problems, and the need to deal therapeutically with potentially severe emotional reactions in certain patients.

The present paper is a brief report of the conclusions and observations drawn from reviewing the data obtained from psychological evaluations of 24 patients over a three-year period in a university hospital transplant program. Our aim is to broaden the base of the relatively few studies in the literature and to discuss some of the problems and issues raised in performing evaluations of these patients.

At the time this paper was written, the authors were all with the Upstate Medical Center, State University of New York, Syracuse, N.Y. 13210, where Dr. Greenberg is Associate Professor and Coordinator of the Psychology Internship Program, Department of Psychiatry, and Drs. Davis and Massey were interns.

PREPARATION FOR EVALUATION

It has been our experience that potential transplant patients confronted with having to go through psychological testing often react with either fear or anger. The fear is probably most often attributable to the patients' feelings of vulnerability, since they experience a loss in intellectual functioning as a result of uremia. Abrams (1) has pointed out that uremia usually leads to some degree of "organicity," with difficulties in attention-concentration, visual-motor coordination, and nonverbal abstraction. In many cases patients may have the unrealistic feeling that they will not be admitted to the program if they cannot answer some of the test questions put to them.

Patients who respond with anger seem to be defending against their fears by angrily asking, "What does this testing have to do with my physical problems?" Both the fear and the anger often lead to the same result, namely, that the patient is hesitant to be evaluated and resistant in the testing situation. Such attitudes and expectations lead to many practical problems. For example, we have found that these patients, if they are out of the hospital, tend to cancel testing appointments much more frequently than other types of patients.

Greenberg and associates (7–9) have shown in a number of studies of the psychotherapeutic relationship that the nature of the message given to patients before they ever meet the therapist can affect their perceptions of the therapist and their willingness to cooperate with him. Greenberg (10) has also pointed out, utilizing evidence from the literatures of medicine, social psychology, and psychotherapy, that "referral messages" play an important role in obtaining the utmost in patient confidence, cooperation, and willingness to disclose and share feelings. The positive effects of structuring information before treatment have already been demonstrated for the recovery of surgical patients (11–13) and the improvement of psychotherapy patients (14, 15).

These findings seem particularly relevant for patients with kidney disease who are about to have psychological testing. We have found that the evaluation process can be significantly facilitated by giving time and care to preparing these patients for the procedures. Simply telling a patient that he is scheduled for blood tests and psychological testing does not seem sufficient. The two types of tests are not equivalent objectively or in the minds of patients. Furthermore, a large number of patients are not prepared for the fact that the testing will last a number of

hours and will require their cooperation.

Patients appear to be more receptive when they are told explicitly that psychological testing is required to aid in knowing as much about them as possible. The more that is known about their strengths and difficulties, the easier it will be to help them. By realistically providing the patients with information about why testing is needed, along with some idea of what it will be like, we have found it easier to gain the patient's cooperation and, hence, the best possible picture of his strengths. While these comments may seem like common sense, we have found that a rather high percentage of patients referred from medical services either do not know they have been scheduled for evaluation or have absolutely no idea about the kind of testing they will be faced with.

Needless to say, under such conditions many patients soon get the idea that there is little concern for them as people and that little reliance is being placed on their cooperation or capabilities. Providing appropriate referral information can help the patient to feel that he too is responsible for the course of treatment and that he too is playing an active part in the process. This would help to foster a doctor-patient alliance and thereby may even aid the therapeutic process beyond its value in the evaluation procedure.

INTELLECTUAL EVALUATION

Because of the nature of renal disease, there is always some potential for cerebral organic loss. Some researchers (1) feel that renal disease is always accompanied by some degree of organic impairment and that an intellectual evaluation is therefore necessary as part of the overall psychological evaluation to aid in the assessment of the degree and nature of the organicity. The level of intellectual functioning for the 24 kidney patients in the present sample was assessed by the Wechsler Adult Intelligence Scale. The full scale IQs ranged from 57 to 118, with a mean of 98.2. For the following discussion, deficit or loss was operationally defined in terms of a performance at least one standard deviation below the mean on any subtest tapping a particular area of functioning.

The evaluations indicated that most of the patients showed losses that would be consistent with a hypothesis of organicity. Specifically, 21 of the 24 patients showed signs of deficit in one or more areas. Particularly significant was the finding that 16 showed impairment of visual-motor coordination and 14 had suffered some deficit in their ability to learn new material. In addition, impaired attention-concentration was noted in five patients, four showed some loss of abstracting ability, four had impaired judgment, one showed loss in judgment and abstraction, and one had some loss in judgment, abstraction, and attention-concentration.

These data lend clear empirical support to the contention that renal disease results in organic-like losses in intellectual functioning in most cases. However, they also suggest that the loss may not be inevitable and that it may take different forms in different people. Future research may be aimed toward the question of whether the kind of loss experienced is mediated by such variables as the type of disease and its chronicity. It is also an open question as to whether losses can be significantly reversed after a successful transplant.

The finding of intellectual impairment in most kidney patients has implications for their convalescence and recovery. Depending on the degree and nature of the impairment, the patient may be rendered unable to care for many of his medical needs and may be more dependent on others. Some of the patients may not be able to function at their previous levels of occupation, and in this case the evaluation, in outlining the patient's strengths, may give some indication of the ease with which he might be retrained for another job.

Some of the patients in our sample are learning the dialysis procedure in order to eventually be chronically dialyzed in their homes. The dialysis procedure is relatively complex and requires an ability to respond quickly and appropriately in an emergency. Thus the finding that most of the sample patients showed particular losses in visual-motor coordination and ability to learn new material appears particularly relevant, since these losses might limit the patients' ability to participate actively in the learning and performance of the dialysis procedure. The intellectual evaluation in our program is geared toward assessing whether or not the patient is impaired to the point of not being able to care for his own needs, consequently endangering his well-being. The present data raise this as a possibility in many cases. Clearly there would be significant value in research that specifically documented the types and levels of skills necessary to deal with the home dialysis procedure.

It should be noted that our study sample was markedly different in terms of mean IQ and IQ range from the Sand, Livingston, and Wright (6) sample, which had a mean IQ of 115, with a range of 94 to 143. They ascribed the fact that their sample was well above the national norms for intelligence to the probable informal preselection of patients suggested for candidacy by referring physicians. The large IQ difference between the two samples suggests that the patient populations in different centers may not be equivalent on many dimensions and that caution must be used in generalizing the findings from any one study. However, our sample's mean IQ is closer to the population mean of 100 and hence may be a more representative sample than the one previously reported.

PERSONALITY EVALUATION

Personality evaluations in our program are based on information both from interviews and from extensive psychological test batteries, including such projective tests as the Rorschach. The aim of the evaluation is to explicate how and with what ego resources the candidate is coping with the stress of renal failure and how he may be able to cope with future major surgery or dialysis. Perhaps the greatest psychological stress the patient will have to face is the waiting period during the weeks or

months before a kidney becomes available. At this time the medical regimen is especially stringent, physical energy may wax and wane according to levels of urea toxicity, and the patient may be spending at least two days a week in the hospital being dialyzed. Mere survival during this indeterminate period can become an extremely stressful process.

With regard to dialysis candidates, Sand, Livingston, and Wright (6) have demonstrated that the patients who are seen as adjusting most successfully seem to be different from the less adaptive patients in showing higher intelligence, less defensiveness about admitting to anxiety or emotional difficulty, less reliance on emotional defenses involving physical symptoms (e.g., hypochondriasis and hysteria), and more satisfactory emotional support from family members. They seemed particularly surprised that their sample was free from gross psychological disturbances (e.g., psychoses) and suggested that the relative stability of their patient sample might be in part an artifact of the informal preselection of patients.

As noted previously, the patients in our sample seemed to have been less select, at least with respect to intelligence. Nonetheless, the results of our study are strikingly consistent with the previous findings. None of our candidates was found to be schizophrenic. None exhibited hallucinations, delusions, or thought disorder. While the performance of a few candidates indicated some impaired judgment, the reality contact of almost all the patients was quite good, considering their stressful life situation. It must be emphasized, however, that some candidates maintained effective reality testing at the price of limiting their involvement with the environment and by denying affect-arousing stimuli.

In general it was quite striking how well most patients adapted to the necessity for transplant surgery. The data from this study and the previous report of Sand, Livingston, and Wright strongly suggest that it is the rare person who breaks down psychologically under the stress of this life-and-death situation. Thus one should not consider signs of severe depression, personality disorganization, or thought disorder as typical for this type of patient.

The most consistent finding in our evaluations of patients with renal failure was a significant decrease in the amount of energy available for coping with stress. This lack of energy was manifested chiefly by lowered levels of responsivity and affective arousal. Many of the patients seemed to resign themselves to their problems while withdrawing investment from the world about them and becoming passive recipients of medical treatment. While this lack of resiliency and energy was typical of most patients, a few were able to maintain their concern for the world and attempted to cope actively with their problems.

As noted, our patient sample exhibited significantly lowered affective arousal. On projective testing, half of the 24 patients did not respond to affective stimuli at all and eight appeared to have a great deal of difficulty handling affect once it was stirred up. Only four of the 24 patients were judged to be responding appropriately to affect-arousing stimuli. Thus, the degree of psychological stress kidney patients deal with was shown by the finding that most patients are either heavily defended and don't respond to affective stimuli or, if they do respond, they have trouble maintaining control and modulating their responses with ideational defenses. As is consistent with the literature (3), most of our patients appeared to employ the defense mechanism of denial in attempting to keep from awareness the gravity of their situation. They simply did not wish to face their own feelings regarding renal failure, the usually extended period of hemodialysis, and the prospect of a transplant. If affect did appear, it tended to take the form of either depression or anger. This observation is also quite consistent with previous reports (2, 3).

The resistance against looking at the implications of their illness made it very unlikely that the average candidate would have worked through his feelings to the point of having both a realistic appraisal of the situation and positive expectations about the future. Most candidates seemed to have defended against recognizing their fears of death, depression, and anger at becoming ill. Further, there was the hard-to-accept notion that a transplant would mean that someone else would have to lose either his life or his kidney. One patient, for example, was extremely hesitant to admit he was listening to the radio during the Fourth of July weekend in the hope that an accident would provide a victim with matching kidney tissue.

The tendency of candidates to refrain from actively worrying about and dealing with their problems and treatment may have negative prognostic implications. Janis (13), in his delineation of the theoretical concept of the "work of worrying," has emphasized the potential benefit to surgical patients of a moderate amount of anticipatory fear in developing tolerance to stress. While positive prognostic expectations are desirable, the work of Janis (13), Egbert and associates (12), and Andrew (11), among others, has strongly suggested that stress tolerance on both physical and emotional levels is increased when patients are led toward making realistic appraisals of their current and possible future conditions.

CONCLUSIONS

In sum, the present study is supportive of observations in the literature and adds to the generality of the conclusions drawn. As in the one previous study that used data from psychological tests, we found very little evidence of any gross emotional maladjustment in our patient sample. Our results also lend empirical support to the speculations of others that most candidates for renal transplant exhibit behaviors that are, at least in some areas, consistent with a hypothesis of organic losses in intellectual functioning. Within the sphere of personality most patients seem to be defending heavily against recognizing the seriousness of their illness. Responsivity tends to be lowered as patients withdraw into themselves, and

affect is either denied expression or appears with little control once it is stirred up.

Our experience strongly suggests that psychological factors play an important role in the individual's ability to adapt to the stresses of renal failure, dialysis, and transplant. It seems clear that more reports from other centers are needed to broaden the base of the few studies in the literature as well as to help increase the effectiveness of current evaluations and treatment programs.

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Answers to Questions of the Month

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The Volunteer Rescue Squad: The Impact of a Group on the Psychological Adaptation of Its Members

BY GORDON W. KEATING, M.D., WALTER A. BROWN, M.D., AND KAY STANDLEY, PH.D.

Young rescue squad volunteers were studied to ascertain some of the developmental determinants of rescue work and to define aspects of the culture of the squad and relate these to the personal development of its members. The authors suggest that squad membership may serve important adaptive functions for the individual: in mastering past traumas, becoming independent from the primary family, and in developing self-control and competence. They indicate the need for further study of the contribution of voluntary group membership to the individual's development and adaptation; there may be important implications for various types of therapy and for community consultation.

MOST PEOPLE consciously or unconsciously avoid exposure to situations of injury, violence, and death. However, volunteer rescue workers confront such situations regularly and without the usual compensations and clearly defined roles of the technician or professional. This study focuses on a volunteer rescue squad and some of its members.

Although the socioeconomic characteristics of volunteers have been studied (1), behavioral research has not focused on the psychological determinants of membership in specific voluntary organizations or on the closely related problem of the relationship of volunteer activity to the current psychological adaptation of the individual. Although persons with shared vocational and avocational interests have been studied from the individual psychodynamic point of view—e.g., Peace Corps teachers in Ghana (2), jet pilots (3), missionaries (4), and disadvantaged adolescents in the Job Corps (5)—none of these studies has been particularly concerned with the effects of group membership.

The importance of group membership and group process to the psychological adaptation and growth of the individual was recognized by Hamburg and Adams in their recent review of coping behavior (6). Membership in certain voluntary vocational or avocational groups may represent adaptations to particular environmental stresses or intrapsychic conflicts. In many cases the relevance of the group to the problems of the individual members is obvious, e.g., Alcoholics Anonymous, but in other groups the function of helping individual members to cope may not be explicit or even intended.

The objectives of our study were to: 1) investigate some of the developmental determinants of rescue work and 2) define aspects of the culture of the squad and relate these to the personal development and adjustment of its members. We postulated that certain events in the childhood or adolescence of a volunteer might relate to his becoming a squad member and that membership in the squad might promote adaptive coping with some developmental tasks of late adolescence and early adulthood: developing an integrated identity, achieving self-respect, and attaining independence from the family of origin. Moreover, helping injured people in situations of violence, injury, and death might help the volunteer to cope with his aggressive impulses, to master past traumatic events, or to compensate for past failures or inadequacies.

METHOD

The subjects were recruited from a single volunteer rescue squad located in a metropolitan suburb. Subjects were asked to complete a battery of questionnaires and psychological tests in two separate sessions totaling about two and one-half hours. In addition, five subjects were interviewed and given the Thematic Apperception Test (TAT).

The test battery for the main sample consisted of the following measures: 1) the standard booklet form of the Minnesota Multiphasic Personality Inventory (MMPI), 2) Rotter's Internal-External Control Scale (7), 3) the Interpersonal Checklist (8), 4) a medical questionnaire on the history of serious illness and accidents involving the volunteer or members of his family, 5) a questionnaire concerning education, marital status, occupation, family background, and details about squad membership, and 6) a questionnaire concerning perceptions of parental attitudes about the rescue squad, reasons for joining and remaining in the squad, qualities of a good rescue worker, and feelings about dealing with injured people.

RESULTS

Description of Squad and Membership

The squad has been in continuous existence for 30

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years. Currently there are about 60 active members organized into seven teams of eight or nine members, including a captain and a lieutenant. The daily management of the squad is the responsibility of the chief, deputy chief, and an assistant chief. Financial and organizational planning are handled by a board consisting of ten people, including the chief and certain associate members (older men who were formerly active volunteers). All leaders, including the captains and lieutenants, are elected democratically by the active members. New members are given probationary status for six months, after which time they are elected to regular membership by a three-fourths majority of the regular active members.

The squad headquarters serves as the center for all rescue operations and for other business and social functions. The squad is well equipped with rescue vehicles and equipment, which the members maintain and operate. There are programs of instruction on first aid and proper use of equipment. In some ways the squad resembles a fraternity, with its raucous parties, competitive sports, and social subgroupings. On the other hand, the squad is much more than a fraternity because of its goal of providing aid and transport to the injured.

Our sample does not reflect the characteristics of the entire squad, since the study involved only active members below the rank of assistant chief. The sample contains about half of the active members, including representative numbers of probationary members, privates, lieutenants, and captains.

Length of membership in the squad varies in our sample from a few months to more than six years. Most members joined by the time they were 21. Time spent in squad-related activities varies from a minimum of about eight hours per week up to 60 or more hours per week. Only three subjects did other types of volunteer work, and only ten were members of other social or service organizations. About two-thirds of the sample were influenced to join the squad by other volunteers.

Social and Family Characteristics

The median age of the sample is about 22 years, with a rather even distribution from ages 17 to 27. Twenty-six of the 33 men in the sample are unmarried, and 20 of these are living with their families of origin. About half the sample have graduated from high school only. The other half have, in addition, completed some college, but only three have bachelor's degrees. Most of the men in our sample are employed full time in occupations ranging from delivery boy to high-paying managerial positions. Half the men earn less than $5,000. The rest earn from $5,000 to more than $15,000 a year. Nearly all of the parents of these men are married and living together. Three fathers are deceased. Paternal occupations vary from unskilled laborer to professional. The educational level of the fathers also varies, but 14 of 33 have college degrees.

Psychological Test Data

In general, the results of the psychological tests reveal great diversity among individual members and rarely support generalizations about the entire rescue squad.

Although the MMPI profiles of some members could be described as pathological or deviant, there is no evidence of group deviance on any of the MMPI scales. The mean group profile has peaks on "psychopathic deviate" (Pd) and "hypomania" (Ma) and is not remarkable for a population of young men. Considerable efforts did not yield any meaningful subgroups among the profiles.

The Internal-External Control Scale reflects the extent to which the individual sees events in his life as self-determined or as determined by external forces. The squad members showed a wide range of scores from a low (internal) score of 1 to a high (external) score of 17. The mean group score was 7.7, with a standard deviation of 3.5. This mean score is not unusual and, with such great variability in individual scores, gives no evidence of a meaningful group tendency.

The Interpersonal Checklist was used to explore the self-concept of the squad member and to relate his self-concept to his role as a volunteer. Each volunteer was asked to describe himself, his ideal self, and the ideal rescue squad volunteer. The subjects' descriptions of these concepts can be grouped under eight interpersonal themes or styles. The results of this analysis are shown in table 1.

In regard to the ratings of self, the sample shows some diversity. However, 79 percent are described by one of three interpersonal themes: managerial-autocratic, responsible-hypernormal, and competitive-narcissistic. Of more interest are the results for the ratings of the ideal volunteer. Seventy-two percent of the ratings fit the managerial-autocratic theme, an interpersonal approach characterized by tendencies to manage, direct, lead, or guide others or, in the extreme, to dominate others. The second most common theme for the ideal volunteer (noted in only 16 percent of the cases) is responsible-hypernormal, which includes sympathizing, helping, and supporting others or, in the extreme, pitying others and compulsively taking responsibility. The shared view of the ideal volunteer as managerial-autocratic is striking and perhaps is related to the importance of organization and decisive individual action in rescue operations. Obviously, sympathy and the wish to help are not enough in rescue work.

Of interest is the fact that more subjects' ratings of ideal self (61 percent) than of self (38 percent) fit the managerial-autocratic theme. This suggests that the concept of the ideal volunteer may serve as a kind of organizing principle for the squad member's ideal self-concept. Hence success in the rescue squad comes to mean that the individual volunteer approaches more nearly his ideal self. Of course, success in the squad may *result* from change in the individual's self-concept, so that the process is perhaps best viewed as an interaction. This interaction will be illustrated in one of the case reports to follow.

HYPOTHESES AND CASE REPORTS

While the idea that membership in the rescue squad reflects shared personality traits or that it serves similar

TABLE 1

Percentages of Interpersonal Checklist Ratings of Self, Ideal Self, and Ideal Rescue Squad Volunteer Described by Various Themes

Concept	Number	Interpersonal Themes			
		Competitive-Narcissistic	Managerial-Autocratic	Responsible-Hypernormal	All other themes
Self	32	19	38	22	21
Ideal self	31	3	61	19	17
Ideal volunteer	25	4	72	16	8

psychological functions for most members is not supported by our data, squad membership may be important for the adaptation of the individual member. The individual case report offers an approach to this question and is used to illustrate certain hypotheses about the adaptive functions of squad membership.

Rescue work as mastery of past traumas. Rescue work requires active, organized coping with the physical trauma of others. Some volunteers might choose such work as a means of dealing with past physical traumas or with the fear of a future trauma to themselves or loved ones.

As a group the squad members had few significant past or current illnesses. Physical trauma due to accidents was much more common. We doubt that the number of accidents is unusual for a population of young men and do not consider our subjects *as a group* to be accident-prone. However, several individuals did describe many accidental injuries and might be considered to be accident-prone.

Since most of the members grew up in the area served by the rescue squad, we wondered how many had themselves been rescued by the squad. For accidents not related to rescue work, 11 subjects were rescued by the squad: five before they were members, five after they joined, and one both before and after he joined.

Case 1. J.F., a 21-year-old married salesman, joined the squad at age 18. He has one older brother who joined the squad before him and influenced him to join. His father was a volunteer fireman, and his mother did volunteer work at various hospitals. Before joining the squad, J.F. had much exposure to squad activities. He knew many members. He was a "dummy" victim for rescue exercises. However, on four occasions he was a real victim for the squad. Most of these involved minor injuries, although the accidents were potentially quite serious. J.F. reported numerous accidents, primarily automobile accidents, all of which occurred prior to his joining the squad.

There is little doubt that the squad plays an important role in J.F.'s life. Despite being married and working full time, he spends an average of 36 hours per week with the squad. J.F.'s avocational interests are rather hazardous: hunting sharks underwater with a spear gun, boar hunting, and car racing.

It is clear that there are multiple determinants in J.F.'s joining and remaining in the squad, but the possible influence of his numerous accidents and regular rescues by the squad prior to his joining is most intriguing. Being in the squad and knowing rescue techniques may offer some security in the hazardous world in which he lives. "[Before I joined the squad] I didn't know enough to be bold enough to go out and try to help somebody, to tell people I'm Larry Lifesaver.... I don't broadcast it now, but should this situation arise.... Well, when your number's up your number's up, but sometimes you can put it off." To support his argument he described how he saved two people from drowning because of the knowledge he had acquired in rescue work. Also, in answer to a question about what he liked about the squad, he said: "Your training can be helpful in later years if someone in your family or near you becomes ill or hurt."

His dangerous hobbies and numerous accidents are highly suggestive of a counterphobic defense against fears of injury and death. Perhaps by dealing over and over with the accidents of *others* in his rescue work, he gains some command of his *own* fears of injury and death. This may have enabled him to give up his pathological counterphobic behavior of putting himself in situations of danger. At least, he has had no accidents in the years since he joined the squad.

Our hypothesis about the possible significance of a past trauma to rescue work also included trauma to or death of loved ones. In this regard one interesting finding emerged. Each case of parental death in our sample (three fathers) had involved rescue attempts by the squad. In two cases the fathers died of heart attacks when the sons were seven and 14 years of age. The third paternal death, from a progressive respiratory disease, occurred when the son was 21 (three years before he joined the squad). One other case of interest is that of a subject whose entire family, including himself, was involved in an automobile accident when he was 11. Unfortunately, we do not have sufficient information on these subjects to explore the connection, if any, between the traumatic incidents and their later participation in volunteer rescue work.

The rescue squad as a social support in the struggle for independence from family. One of the important developmental tasks of the adolescent and young adult is the attainment of independence from his primary family. The rescue squad provides a stable group of peers as well as older male figures and a place to come at any time for companionship. Nearly two-thirds of the men in our sample are still living at home with their parents. The rescue squad seems to function as a social support for some of the volunteers who are struggling to become independent from their families of origin.

Case 2. T.L., an unmarried 21-year-old man, joined the squad at age 17. He works full time as a reporter for a local newspaper. He is an only child and, although financially self-supporting, lives with his parents. He joined the squad in his last year of high school. He recalls that as a child he used to go with his mother to watch the squad play baseball and that she was upset to see some of the members drinking beer. He describes his parents' initial ambivalence about his joining the squad as follows: "When I first came on the squad my parents wanted me to stay only on my duty night. They were a little hesitant even giving permission.... I don't know if it was because they didn't want me out there dealing with people."

On the Interpersonal Checklist he described himself, his ideal self, and the ideal volunteer as responsible-hypernormal. This interpersonal style is characterized by giving help, sympathy, and support to others, or, in the extreme form, by excessive pity and compulsive responsibility. Other data support this view of T.L. For example, in answer to a question about what he liked about being a rescue squad volunteer, he wrote: "Just the general idea that there are many people in the area that get hurt, and someone must want to help and care for these people, and that's what I like to do."

That this is not just a superficial explanation was made clear in the interview and TAT:

> When I first came on the squad I was excited and if I were called now I'd feel the same way.... It's a funny feeling, a tingle that goes through you. Whenever the bell goes off it's a call for help. That's the entire purpose.... Whenever I go on a call I hope that nobody is hurt seriously, but if they are, I know I'll be there to help them.

In response to the blank TAT card, he said:

> Could be a picture of the happiness of a father when he looks into the room to see the child that his wife has just borne ... or you could have a picture of a bad accident such as we had this past week.... The bodies were just strewn across [the road] and you just wonder how this could happen to men. A life is lost, you feel sorry that he or she could have a loved one somewhere, and you almost feel the pain that they have when they find out that the loved one has perished from the earth.

T.L.'s need to feel needed by the squad and by the people he rescues seems basic to his motivation for rescue work. Also, he is struggling to free himself from overinvolvement with his family, especially his mother. He stated: "My mother is always saying she misses me. I tell her they've had me for 21 years. I've got to grow up sometime." Probably the squad is a transitional object for his dependency needs, thus allowing him to become more independent of his parents.

The rescue squad as a school for the development of self-control and competence. The squad appeals to the action-oriented personality. Tremendous importance is placed on the ability to engage in constructive, organized action in the face of major or minor disaster. However, controlled, not impulsive, action is required. For example, rescue vehicles may be driven rapidly with sirens screaming, but carelessness at any time and inappropriate speeding are not condoned. Squad members' eligibility for driving rescue vehicles is regulated by an elaborate system of advancement based on their experience and safety record.

Also, the individual is expected to coordinate his actions with others. A capacity for independent, cooperative individual action is needed; heroic individual action is not expected or even desired. This aspect of the group culture is reflected in the answers given by our sample to a question about the characteristics of a good rescue squad worker. Steadiness and reliability under pressure were ranked as the two most important of seven characteristics; physical strength and coordination and courage were ranked as the two least important.

One open-ended question asked what the volunteer enjoyed most about being on the squad. When these answers were grouped, it was found that helping people in need was the most frequently mentioned factor. Social involvement with other squad members and a feeling of competence from a job well done were the next two most frequent answers. The following case report illustrates the role that the squad may have in providing a socially constructive outlet for action while at the same time enhancing the volunteer's self-esteem and sense of competence.

Case 3. H.S., a 25-year-old recently married college graduate, joined the squad when he was 17. He has steadily moved up the ranks and currently is third captain on the squad. He works as a manager for a large hardware store. H.S. comes from an upper-middle-class family. Currently, he spends about 18 hours per week with the squad. He feels that his relationships with other volunteers are the most enjoyable aspect of being on the squad. Also, he enjoys "belonging to and running one of the best, if not the best, rescue squad in the world." H.S. is highly action-oriented. In answer to a question about his feelings when dealing with injured people, he said, "If you're worth a damn you don't feel anything on calls because you're *doing* things—like a doctor."

Although the significance of rescue squad membership for H.S. is multifaceted, two aspects seem especially important. The squad provides a fraternity-like group of peers, and the rescue work provides an outlet for his need for action and an environment for the development of competence and self-control through organized action.

This case report also illustrates the interaction of self-concept with the group culture of the squad. H.S.'s self-concept fits the competitive-narcissistic theme of the Interpersonal Checklist. The adaptive features of this theme are competitiveness and assertiveness; the maladaptive features are boastfulness and exploitation of others. His concepts of ideal self and ideal volunteer fit the managerial-autocratic theme, which emphasizes leadership and organization. This suggests that the squad culture has perhaps influenced his ideal self-concept. Success in the squad brings him closer to his ideal self. The reverse is also true. As he becomes more like his ideal self, he is more likely to succeed in the squad culture. In any case, the outcome for H.S. would likely be a greater sense of personal control and competence.

DISCUSSION

The question of whether our findings apply to rescue squad volunteers in general could be explored by studying other volunteer rescue squads. However, the general notion that voluntary group membership is an important means of coping for the individual probably holds true for many types of voluntary organizations. The specific

stresses and conflicts as well as the specific coping mechanisms would vary according to the particular organization and individual involved.

General systems theory and the new therapies derived from it have placed emphasis on the current social systems and groups to which the individual belongs. The new field of organizational behavior has given some attention to the relationship between organizational culture and psychological growth (9). Recent interest in the "indigenous therapist" suggests the analogy of the "indigenous group," which may be similar to a therapy group in helping the individual to cope with his problems. Yet a great deal remains to be learned about the interaction between organizational culture and individual adaptation and development. Study of this interaction may have profound implications for preventive psychiatry. For example, an organization such as the rescue squad may provide a socially constructive and growth-enhancing outlet for energetic and action-oriented youth, who otherwise might become alienated from society or engage in antisocial activities.

The contribution of voluntary group membership to the development and adaptation of the individual is an appropriate area for future research, with important implications for various types of therapy and for community consultation.

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Political Psychiatry: The Psychiatrist in Elective Public Office

BY EDWARD MESSNER, M.D.

The author attempts to show that elected public officials encounter numerous opportunities for action favoring the prevention of psychiatric disorders and the promotion of mental vigor. He demonstrates that preventive measures are compatible with and usually exemplify discharging the duties of public office thoroughly and effectively. The observations of the author, a psychiatrist who was elected to the school committee in his town, are made from first-hand experience and might be viewed as representing a political microcosm.

NUMEROUS SOCIAL, ECONOMIC, political, and environmental phenomena affect personality development and susceptibility to psychiatric disorders. Many of these phenomena are regulated or influenced by government at local, state, or federal levels.

Governmental decisions are usually based on multiple considerations, but only seldom are they made with explicit concern for their consequences regarding the incidence of psychiatric disorders in the constituency. If these consequences were not only made explicit but were also given high priorities, it seems reasonable to expect that the frequency and severity of some psychiatric conditions might be reduced.

At each level of government in the United States the greatest power is generally vested in elective offices. Elected officials determine public policy and often direct the administration of governmental functions. They are faced on a routine basis with choices that can affect the prevention of psychiatric disorders. While these choices vary in their potential quantitative effect on mental health, each one represents an opportunity, however small, to move in the direction of a healthier society or perhaps of a society of healthier individuals. For elected officials these opportunities are frequent and are very much in the line of official duty. Beyond that, certain opportunities to help prevent psychiatric disorders can be found in some of the unofficial actions that go with public office. These include speeches, news conferences, informal discussions with other officials, and some features of the official's personal conduct.

The influence that one can have on preventive actions varies with the office and with the level of government. The situations I will describe here relate to an elected school committee or board of education and are derived from first-hand experience. I was elected to the school committee of a small town in Massachusetts in February 1971. The population of the town was approximately 12,000 at that time.

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OFFICIAL ACTIONS AFFECTING PREVENTION

The broad responsibility of a school committee is to take general charge of the public schools. Foremost among its functions is to develop a curriculum that meets the needs and interests of the students. The school committee can provide special education classes for retarded or emotionally disturbed children and can enrich the regular curriculum in a variety of ways using many techniques, such as complex computer scheduling. For children whose education will stop at the high school level, it can provide courses involving work experience and on-the-job training.

A work-study program requires participation by businesses in the community. Additional integration of the school system with the town at large can be cultivated by recruiting volunteers to help perform many tasks in the school system. This may serve several functions, including the reduction of adolescents' alienation from adults and the converse.

To illustrate some of the interventions available to an elected official, I shall describe some of my own actions. For example, for the sake of economy as well as of integration, I initiated and organized a system of school volunteers. It centers around a committee that attempts to match volunteers and tasks which need to be performed in areas of maintenance, administration, curriculum enrichment, etc. It was accepted officially by the school committee, and many townspeople have come forward to participate.

The school committee has great influence on the objectives, philosophy, and principles of education in the public schools; it can pursue a variety of goals. These can include the encouragement of human compassion, the development of capacities for self-discipline, an understanding of the individual's responsibilities to his family, community, nation, and mankind, and the development of other virtues of maturity.

In taking charge of the public schools the school committee hires teachers, determines various policies involving the conditions of their employment, and influences their professional lives in many ways. Generally, the morale and effectiveness of any group of government employees are factors affecting not only their own mental health, but sometimes the constituency as well. Since

teachers influence students in many ways, appointing capable, mature, creative, and compassionate educators can lead to wholesome influences on the students. Once appointed, they can be helped to function at their best through considerate, reasonable, and respectful behavior by the school committee.

Prior to my election to the school committee, a considerable degree of strife between the committee and the educators had existed. The school committee members had publicly directed many disparaging comments toward the teachers and the administrators. Soon after my election, I proposed, and the committee adopted, a procedure for commending educators and others who performed outstanding work. This served as a clear and practical indication of a quest for harmony and balance.

The school system, through its guidance functions, can detect which children are particularly susceptible to psychiatric conditions. Once the vulnerable individuals are recognized, they can be helped in such ways as appropriate class placements, family conferences, referrals for professional help, etc. The school committee can strengthen and expand these functions.

In a similar vein community organizations like the Parent-Teacher Association, junior baseball leagues, and fraternal organizations can make substantial contributions to the prevention or reduction of delinquency. The school committee can support and encourage these organizations by allowing them to use such school facilities as athletic fields, meeting rooms, auditoriums, and cafeterias.

Wide participation by the individual residents of a community in the workings of its government can also serve a number of preventive functions and can lead to a sense of kinship and fraternity. Such participation can offer hope to members of the community through mutual responsiveness with the agencies of its government. As an important agency of local government, the school committee can encourage public participation in its meetings, welcome and support citizens' advisory groups, and make its deliberations easily accessible to the press. It can promote parent-teacher conferences and the development of adult education programs.

For example, the day after my election I proposed, and the school committee adopted, a policy of publishing the agendas of all official meetings. Later I proposed forming an advisory committee to evaluate all business procedures employed by the school department. The school committee adopted it, and a group of highly competent and respected business leaders volunteered to serve on the advisory committee. I supported a policy of holding school committee meetings in school libraries or cafeterias instead of in the confining office of the superintendent. This made attendance by the press and public a great deal more comfortable than it had been in the past. I also proposed procedures for systematic parent-teacher conferences that have not yet been adopted, and I fostered the establishment of an adult educational program that is nearly self-financing.

An individual member of a school committee cannot determine these objectives and functions single-handedly, although he does have the power and the responsibility to exert direct influence on the choices which that body selects. An individual on a school committee need not be a psychiatrist to be able to make sound decisions. However, most elected officials do not seem to think explicitly about the prevention of psychiatric disorders. Many opportunities for prevention become evident if one is prepared to recognize them.

UNOFFICIAL ACTIONS AFFECTING PREVENTION

An elected official participates in a relationship (which is defined by law) with each of his constituents. Beyond that these relationships extend into emotional areas. Accordingly, he is in a position to affect his constituents, constructively or otherwise, far more than most appointed officials. Elected officials, for example, are open to observation when performing their duties at public meetings of their agencies. A psychiatrist in public office becomes less obscure and therefore less mysterious, and consequently, psychiatry might also become less strange and threatening to the constituency. It is well known that familiarity can breed feelings other than trust. However, if the psychiatrist in public office is accepted as a sincere participant in town affairs and as being genuinely concerned about its problems, then psychiatry might become relatively acceptable by association.

The acceptability of psychiatry in its usual forms is far from being the entire issue when it comes to prevention. From the viewpoint of government, prevention involves a variety of institutions, processes, and groups. Public officials communicate on many occasions with their constituents and with fellow officials to persuade and to influence them, and occasionally to listen to them. Some of these occasions can be used to prevent mental disorders.

The promotion of mental vigor encompasses a wide range of political, economic, and social phenomena that are unrecognizable as applied psychiatry except by one who is specifically seeking them.

Mental vigor requires a reduction of bigotry and of alienation. An example of a group prejudice in an early stage of development recently occurred in my town. A large number of apartment houses were constructed because a new interstate highway had made the town more accessible. Restrictions were minimal because the town had not enacted a zoning law. Over a period of several years repeated attempts to pass a zoning law had been defeated. After the construction of the apartments began, enough voters joined together to pass a zoning law and to defeat the usual attempt to rescind it by referendum. At the same time many residents of the town predicted that the occupants of the apartment houses would swell the school population significantly and that as a result, the costs of educating these students would exceed the property tax revenue to be derived from the new structures.

Feelings of resentment arose against the people who were moving into the apartments. Most of the people came from other communities, but some were individuals who had formerly lived in private dwellings in town. They

were not members of any identifiable ethnic, racial, economic, or religious group.

The "apartment people" were blamed for increases in the tax rate. At the time that this hostility first arose, the tax rate had already increased for various reasons, but this could not realistically be attributed to the apartment houses or to their occupants. The antagonism developed before there was any appreciable enrollment in the schools of pupils from families who had recently moved into the town. A new and potentially disruptive form of prejudice seemed to be developing. It occurred to me to go to the new apartment complexes to try to recruit volunteers for the public school system. I thought that by doing so, I could create an opportunity to invite the new residents of the town to join in a community effort while demonstrating to the others that the newcomers could contribute.

As arrangements for the meeting were developed, the local newspapers announced them in detail. The reporters quoted my views and intentions regarding the divisiveness that was evolving. The weekly newspaper, which is mailed free to every household in the town, printed several stories about this effort. The project was an unofficial individual effort, but I was naturally identified as a member of the school committee. It is my impression that this effort attracted more attention than there would have been had I not been an elected official.

When the meeting actually took place, it was well publicized and an editorial was written about it. The local council of churches became interested and wrote a letter to one of the newspapers supporting the idea of welcoming the newcomers. Later, two church leaders contacted me to discuss the issue; both of them informed me that they spoke for groups of laymen who were getting involved.

Since that time, other individuals and groups have demonstrated an interest in including the newcomers in town activities. Recently, for example, the head of the Red Cross drive asked me to help recruit volunteer workers among the people living in the new apartments. Reports of incidents of hostility and bitterness between old and new residents have subsided. This suggests that the prejudice may have decreased.

DISCUSSION

My experience in government up to now has been extremely encouraging. It has provided evidence that democratic government has great potential for the promotion of mental and emotional vigor. It has indicated that "government of the people, by the people, and for the people," taken in its literal sense, might become the basis for the prevention and reduction of mental, emotional, and behavioral disorders. This experience has directed my attention to the possible value of psychiatric study of elected officials and of the interpersonal processes related to public office. One way to conduct this kind of research would be to study oneself as a participant. Other studies could attempt to delineate the many ways in which elected officials can affect the emotional atmosphere of a community.

The results of these studies might be applied by public officials who are not psychiatrists but who are concerned about mental health. More important, citizens might come to recognize that such concern could be expected and should be demanded of their elected officials. In part this article is an invitation to psychiatrists to consider service as elected public officials. There is much to be learned through direct participation. Moreover, it is rewarding as a personal contribution of one's time, energy, and intelligence to his fellow citizens in a challenging enterprise.

Very few psychiatrists seem to have served in elective office. Those who have served apparently have published very little about their experience. A computer-based survey (1) of 2,300 of the world's biomedical journals, covering a period of three years (January 1968–December 1970), revealed no articles about psychiatrists as candidates for or occupants of elective office. This search was conducted by the Medical Literature Analysis and Retrieval System (MEDLARS), a service of the National Library of Medicine.

Elective office can provide the psychiatrist with a special opportunity to serve his community as a responsible citizen. It can enable him to observe and to participate in varied and complex political interactions. In some instances a psychiatrist's special awareness of developmental and interpersonal processes can direct him to official actions that might serve to prevent or to reduce the incidence of psychiatric disorders. Elective office provides opportunities to examine and to test possibilities of enhancing the mental vigor of a constituency through the medium of the humanistic functioning of its government.

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The Euclid House: A Therapeutic Community Halfway House for Prisoners

BY STEWART L. ALEDORT, M.D., AND MORGAN JONES, M.S.W.

Euclid House represents an attempt to create an effective therapeutic community for prisoners in a halfway house staffed almost totally by blacks and by some ex-offenders. This experiment is viewed as a long-term investment in training staff, developing ideas and concepts, and taking chances in order to tap the creativeness of the staff and residents. The ultimate hope is that this model will serve for some prisoners as an alternative to incarceration.

AMERICAN CORRECTIONAL SYSTEMS are currently faced with the task of dealing with 1.3 million offenders every day and of admitting 2.5 million new prisoners each year. They all have problems of overcrowding, underfunding, and a rising prison population. Thirty-three to 50 percent of all released inmates are reimprisoned within five to ten years after their release, often for more serious offenses (1). Despite the difficulties the correctional systems face, some have initiated major changes in the way they accomplish their task. The Federal Bureau of Prisons and the correctional systems of California and of the District of Columbia are examples.

One significant change is the increasing collaboration between the criminal justice systems and the behavioral sciences. As a result, there is a slow but clearly recognizable shift toward rehabilitation as a goal in the psychiatric sense. Aptitude tests, estimates of personality development, ego strengths, and the extent of family and social integration are now useful parameters of the rehabilitation task. Prisoners are now involved in group psychotherapy, family counseling, and occupational rehabilitation within the prison walls.

One of the most significant concepts in prison reform has been the development of halfway houses and work release centers. In these centers prisoners move from the prison to the community in a controlled, work-oriented setting prior to their parole. This paper will deal with Euclid House, one of 13 halfway houses in the Washington, D.C., correctional system. It is operated by the Psychiatric Institute Foundation under contract to the District of Columbia Department of Corrections. The foundation, a nonprofit research and training center affiliated with the Psychiatric Institute of Washington, D.C., has been actively involved for the last four years in training employees of the District of Columbia Department of Corrections to staff their halfway houses. Through this experience the foundation was asked to submit a proposal to operate its own halfway house under a grant to the Department of Corrections. Another major impetus for this type of community involvement came from the Psychiatric Institute hospital staff. Black staff members who had gained training and experience working with white middle-class patients expressed their wish to apply their skills to a black ghetto population. In October 1970, the Euclid House Community Correctional Treatment Center opened its doors.

This paper will describe the operational model of Euclid House: the adaptation of the therapeutic community, the residents, the staffing, and the statistics compiled after one year of operation.

SETTING

Two brownstone row houses were renovated and combined to house the 55 residents of Euclid House. In addition to the sleeping quarters, there are several meeting rooms throughout the four-story house. Euclid House is located in the Cardozo community of northwest Washington, D.C., which was the scene of intensive rioting and destruction in 1968. The area has an almost totally black population, with a small Spanish-speaking minority. It is characterized by a high incidence of crime, drug abuse, and welfare cases. There are intense fluctuations in the level of aggressive and destructive outbursts, usually directed against the community and the police. Prior to the opening of Euclid House, members of its staff investigated community response to its opening. The reaction of the community was remarkable for the lack of overt hostility and repugnance to the idea of 50 to 100 prisoners living in the neighborhood. The ambivalence of community residents was evident when they brought court action in an attempt to prevent the house from opening but then failed to appear at the final hearing. The case was dropped.

STAFF AND UNIQUE OPERATION

The 16-member staff consists of the medical director (a

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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The authors wish to thank the Euclid House staff, Dr. Jack Durell, and Ms. Barbara Aledort for their assistance with this paper.

psychiatrist), clinical director (who holds a master of social work degree), administrator, and 13 male and female mental health technicians with varying degrees of experience. Four of the technicians are ex-offenders without previous mental health training. The staff, with the exception of the medical director, is black.

Euclid House differs significantly from the other community correctional centers in the District of Columbia in the following ways:

1. For the first time a group of mental health professionals is operating such a center on a private, nonprofit basis under contract to a government agency.

2. Intensive group therapy techniques characteristic of a therapeutic community and previously applied only to institutionalized psychiatric patients (2, 3) are applied in-depth to the rehabilitation of prisoners.

3. The primary task of the other halfway houses is to effect the rapid reentry of effective wage earners into the community. As a result, the prisoner's raison d'être in the house revolves around his ability or inability to meet the task. This approach does not take into consideration the prisoner's life history of poor work performance, faulty interpersonal communications, and marked resistance to highly structured task-oriented systems. There is little therapeutic work done in other areas of his life, particularly family and peer interactions, and his stay in the center is relatively short—one or two months.

4. Euclid House attempts to recreate the broader Cardozo community within the house by allowing each man's life-style to flourish. As a result, the man's performance in the house can more accurately determine his ability to survive and negotiate in the community he must reenter.

5. Euclid House is committed to the development of psychiatric community techniques for the treatment of prisoners on a long-term basis, and it sees itself as a training center for the staff, prisoners, and the community.

RESIDENTS

The residents at Euclid House come from Lorton State Reformatory in the Washington, D.C., area. The criteria for selection are that the residents must be within four to six months of parole and not be known drug addicts. However, as a result of thorough urinalysis and history taking, approximately 20 percent of the residents have been found to have various addictions. The prisoners range in age from 18 to 56 years, with a mean of approximately 25 to 30. To this date, 153 men have either passed through or are presently living in Euclid House.

The men characteristically have a history of severe emotional, social, and financial deprivation. They usually come from a family where only one parent was present. They have early arrest records, starting in adolescence and multiplying in adulthood, coincident with a poor work record. They have a marked inability to have long-term relationships with women and other significant people in their lives. They also have poor educational histories, marked by feelings of inadequacy, and extremely poor frustration tolerances, usually masked by a facade of bravado and omnipotence.

Almost without exception, these men use projection and denial in dealing with their anxieties, which usually center around helplessness and dependency needs. The area of strongest anxiety is the recognition of the "little boy in them," the part of them that needs caring, love, attention, and nurturing. The men also share an unconscious wish for imprisonment, which suggests a hostile dependency on an omnipotent, omniscient object (usually mothers or surrogate mothers), which they relate to in a childish, magical, nonnegotiable manner. This pattern is reinforced by the behavior of the mothers and surrogate mothers.

THERAPEUTIC COMMUNITY

The therapeutic community techniques used in psychiatric settings have had to be modified in order to be effective for the prison population of Euclid House. Some of the modifications are as follows:

1. Open confrontations are not restricted to just the area of irresponsible behavior; an attempt is made to confront residents over such issues as fears of creativity, responsibility, and independence. As a result, authority roles are not restricted, but are rotated among staff and house residents, who assume responsibility for running meetings, leading groups, and making decisions. This policy has resulted in a freeing up of the community (staff and prisoners) to hire, fire, and evaluate staff; to decide who returns to prison; and to make rules and guidelines regarding such issues as passes, days off, privileges, and restrictions. The residents' history of learning through previous sadomasochistic behavior is shifting to one of learning through toleration of anxiety in a responsible position.

2. In order to maximize interactions, the house residents meet five times a week in one-hour team meetings. These are run by group leaders, assistant group leaders, and counselors. There are two one-hour community meetings per week, an open community meeting in which members of the Cardozo area can participate, weekly family meetings, meetings for couples and singles groups, and home visits. There are also meetings of black identity awareness groups.

3. The staff and house residents make significant changes in the planning and direction of the house. There have been frequent program evaluations that have led to marked shifts in the basic structure.[1] Team leaders rotate among the teams supervising each other. After one year, assistant team leaders move to other teams in order to enhance the interaction.

[1] Every three months the staff and residents evaluate the relevance of the teams, the community meetings, and the individual performances of the staff. As a result, it was decided to increase community meetings from one to three a week. Also, team meetings have shifted from strictly administrative sessions to therapy sessions, with special tasks emphasized. Team issues include identity awareness, unemployment, and saving money.

4. Obstacles are built into the program in order to intensify the residents' needs to negotiate with the staff. The 4 p.m. team meetings, which are mandatory, were perceived by the residents as an obstacle to their working eight hours a day. As a result, the residents have learned to negotiate with the teams and their employers in order to work six hours a day, on Saturdays and Sundays, or during early morning hours to satisfy the team needs. This has led to increased self-esteem since the residents were able to articulate their needs and use previous skills that did not lead to criminal behavior. Through this technique the men are able to localize their needs, express them appropriately, and negotiate them without regressing to their earlier, self-punitive styles. The work of negotiating their needs is a major therapeutic task, since almost all the prisoners have been consistently unable to articulate and localize their needs to significant people in their lives. Instead, they have acted out to communicate with these people. As the house residents have been able to learn to negotiate their basic needs, the team meetings have slowly shifted from negotiation of administrative issues to therapeutic groups that discuss past events, significant traumata, and affective issues in each man's life.

ISSUES AND PROBLEMS

The following is a brief summary of some of the basic issues that the therapeutic community has dealt with over the last year. The major issue for the staff has been their need, both overt and covert, to believe the residents' wish to be seen as childlike, helpless, and irresponsible. This is the result of the staff's need to be seen as magically omniscient and omnipresent, as the paragon of "the responsible mature adult." This is a "mythical gap."

The staff and residents of Euclid House resisted examining the areas in which they were similar, e.g., criminal behavior, irresponsibility, dependency, and the need to be nurtured. A great deal of work has been done to teach the staff how to say "no" to the residents and to recognize their own criminal activity. As is the style of Euclid House, dramatic events highlighted this issue. Three staff members who were ex-offenders were discharged from the house for extortion, theft, and irresponsible work performance. This is still ongoing work, with the mythical gap slowly closing and the "real gap" being examined. The real gap existing between the staff and residents has to do with levels of expertise and what they can teach each other. The residents can teach the staff about manipulating people, surviving in chaos, and dealing with failure.

The issue of failure is essential to Euclid House. It is seen as the source of experience and learning and represents a commonality in the house. The directors expected and demanded failure from both staff and residents. It was felt that creativity could not flourish unless the community felt that mistakes in judgment and decision making would not be punished and would not reinforce earlier sadomasochistic life-styles. This clearly led to a great deal of anxiety, which was characterized by the community's preferring to let a creative member (one who took chances and risks with his mind) "hang himself." The safer, less creative position of being subservient to the director's plan was acted out by the community. Through staff meetings, the staff recognized their need to be safe and their ambivalence and rage in their chosen dependent positions. They were then able to slowly move from the sadomasochistic learning experience with the residents to a healthier model of mutual learning and empathy. For example, when a resident breaks a rule he is not disciplined by the usual restriction to the house, but, instead, must now spend time relating to the group his current situation and reasons for his behavior.

The residents who on the surface have done the best (satisfied house rules, worked consistently, had "no problems" and become surrogate leaders) have had disastrous outcomes through either escaping before parole or through recidivistic activities. There are two kinds of disasters possible within Euclid House. The more obvious one is a resident who overextends himself and takes chances that cause the community at large to label him as a criminal. The other disaster is the man who refuses to act in the house as he would in the outer community and, as such, negates the learning experience of failure and survival in the house. To support this is the fact that the residents with the best outcome have been those who can acknowledge their failures and act them out within the house without jeopardizing their freedom.

STATISTICS

According to correctional workers, recidivism statistics among paroled prisoners have little validity unless there is at least a three-year follow-up. It is clear that results reflecting one year's experience cannot be considered statistically significant. However, we think it is important to comment on certain trends that are clearly evident within the first year's experience at Euclid House. Of the 153 men who have either passed through the house or are presently living there, 13 (8.5 percent) have been rearrested, 18 (11.7 percent) have escaped permanently, and, on the house staff's request, nine (5.8 percent) have been reimprisoned for various reasons (namely, alcoholism, fighting, and psychotic reactions). In comparison to the statistics cited at the beginning of this paper, these figures are encouraging. However, what is much more significant is the fact that as the program has progressed (from the first six months to the last six months), there has been a marked decrease in the number of escapes and amount of recidivistic activity. For example, the institution of an orientation group for new arrivals has eliminated prisoners' escapes within their first five days in the house. The orientation group gives the new arrivals a common identity as new members, rather than as disoriented members on an ongoing team.

SUMMARY

Euclid House represents an attempt to create an effec-

tive therapeutic community for prisoners in a halfway house setting using a staff that includes black mental health technicians and ex-offenders. This experiment is viewed as a long-term investment in training staff, developing ideas and concepts, and taking chances and risks to tap the creativeness of the staff and residents. New directions are envisioned, such as a training center for law students, graduate students, and medical students; a day-care center run by supervised prisoners for the working mothers in the community; and increased community involvement. The ultimate hope is that this model will serve for some prisoners as an alternative to incarceration.

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PSYCHIATRIC MEETINGS IN AUSTRALIA

APA members have been invited to participate in two psychiatric meetings to be held in October in Sydney, Australia. The World Federation for Mental Health (W.F.M.H.) will meet October 8–12 on the theme "Cultures in Collision." There will be five days of scientific sessions. Plenary sessions will focus on the following topics: family and community, mass communications, education, physical environment and mental health, migration and mobility, law and mental health, and religion and social change. Members who wish to present papers should submit summaries to Mrs. Valeria Pratt, Chairman, Scientific Committee, W.F.M.H., 9 Langley St., East Syndey, N.S.W. 2010, Australia.

The theme of the Tenth Annual Congress of the Australian and New Zealand College of Psychiatrists (ANZCP) will be "Youth in the Modern World." In addition to studies on adolescents, special attention will be given to the reactions of parents and teachers to today's youth subcultures. Papers related to adolescence and youth may be submitted. Summaries of papers to be considered should be sent to Dr. Frank Weston, Convenor, Scientific Program Committee, ANZCP, 263 East Terrace, Adelaide, South Australia 5000, Australia.

Further information about the congresses can be obtained from Dr. Alfred Auerback, 450 Sutter St., San Francisco, Calif. 94108.

Motivational Factors in Abortion Patients

BY FRANCIS J. KANE, JR., M.D., PETER A. LACHENBRUCH, PH.D., MORRIS A. LIPTON, M.D., PH.D., AND DAVID BARAM

Ninety-nine single white pregnant women seeking abortion were compared with 79 single nonpregnant women of similar background. Most of the women in both groups were college students. Of the pregnant group, 40 percent were found to have motivational factors that may have influenced the occurrence of the pregnancy, such as guilt over use of contraception, a severe acting-out character disorder, or reactions to loss. Psychological testing showed that the pregnant group rated themselves as more impulsive and as tending to externalize aggression. Knowledge of and access to contraception was similar in the two groups. The authors draw inferences from their study as to the most useful kinds of sex education programs colleges might undertake.

STUDIES OF PREGNANCY in adolescents (1–4) have generally reported low levels of sexual education, an ignorance of sexual physiology, a lack of information about and access to contraception, a lack of conscious wishes to be pregnant, and emotional disturbance focusing on an ambivalent mother-child relationship. Some studies also report that a third of those who became pregnant while unmarried repeated the experience shortly thereafter (5). Unfortunately, almost all of the studies reported are uncontrolled; that is, the sample of patients studied was not matched with a control group to provide comparable data.

The study by Gottschalk and associates (6) is the only one utilizing an unmarried control group in an attempt to evaluate the contribution of personality factors to pregnancy in adolescents. The researchers concluded that among the factors important in causing such pregnancies were experiences that minimized the social taboos with respect to youthful premarital sexual intercourse, such as the relative absence of parental supervision and discipline, and the relative lack of reinforcement of Judeo-Christian ethical codes. There was also suggestive evidence that the relative absence of neurotic anxiety or psychophysiologic menstrual disturbances may predispose to early impregnation and that a biological factor may play a part: the pregnant girls appeared to have started menstruating at an earlier age than the control group.

We have also reported a higher self-rating of neuroticism on psychologic testing among a group of black pregnant adolescents compared with a control group who were not pregnant (7). The study to be reported here is an attempt to evaluate the importance of some of these factors in a group of unmarried women who came to the hospital for an abortion.

METHOD

The locus of this study was the obstetric and gynecologic service of the North Carolina Memorial Hospital in Chapel Hill. From June 1970 through January 1971, patients hospitalized for therapeutic abortions were interviewed prior to the abortion by one of us (F.J.K., Jr.) or by a specially trained research assistant. Patients were interviewed on the afternoon prior to the operative procedure or the afternoon following the injection of hypertonic saline solution but before the occurrence of the abortion.

The initial part of the interview was unstructured; it was aimed at eliciting factors that might have contributed to the occurrence of the pregnancy. Later a more structured interview was administered; it was designed to elicit information on the patients': 1) knowledge about and use of birth control methods, 2) knowledge of the accessibility of contraceptive methods, and 3) reasons for use or nonuse of contraceptive methods. Additional data included age, religion, years of education, occupational status, current living arrangements, whether a parent was absent before the patient was 18 years old, occupation and educational achievement of parents, and self-ratings on a three-point scale of commonly reported menstrual symptoms.

All patients interviewed also filled out a Neuroticism Scale Questionnaire (8), which is a 40-item self-rating instrument that gives a total neuroticism score and scores on four subfactors:

1. Submissiveness versus dominance. Those who score themselves as dominant on this bipolar factor describe themselves as dominant, assertive, and aggressive and indicate a tendency to externalize aggression, while those who score themselves as submissive describe opposite tendencies.

2. Sensitivity versus insensitivity or practicality. High scorers on the sensitivity factor are described as tender minded, sensitive, and fastidious. This dimension has been occasionally called "femininity versus masculinity," and, indeed, male homosexuals score significantly higher

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than the general male population on this subfactor. Those with low scores tend to be less emotional and to lack artistic interest and sensitivity; they are described as inclined to be practical, tough, hard, and responsible.

3. Depression versus "happy-go-lucky cheerfulness." A person with a high score on this component is described as showing a picture of depression: glum, sober, serious, subdued, and pessimistic. The low-scoring person is cheerful, happy-go-lucky, and likes excitement and social contact. The latter person is also described as tending to be impulsive.

4. Anxiety. The person who scores high on this component has feelings of anxiety, dread, guilt, inferiority, frustration, and loneliness. The low scorer shows an absence of anxiety feelings and symptoms.

This questionnaire, derived from items discriminating neurotics from normals on the 16 Personality Factor Questionnaire (9), has been described as reliable and valid in prior testing of normals and neurotics. Age and education have been shown to cause no significant variance.

In all, 186 patients were interviewed, representing over 80 percent of the abortion patients hospitalized during this period. Only two patients refused to be interviewed; the others were not interviewed because of the absence of the investigators. This report will concern itself with the 99 unmarried white girls who were evaluated. The data from this group will be compared with material gathered by a similar anonymous questionnaire from a group of 79 single girls residing in a college dormitory, who represented an 85 percent return of their sample. In addition to filling out the anonymous questionnaire, all members of the control group filled out a Neuroticism Scale Questionnaire.

The abortion patients were referred from all over the state and were predominantly students. For this reason, a student group at a large state university was thought to be a suitable comparison group, since they too represented all regions of the state.

RESULTS

The two groups were fairly similar as to demographic variables except for education. The average age of the abortion group was 18.9 years, while the comparison group averaged 18.1 years. Only three of the abortion group had ever been married, while one of the control group had been. Nine of the abortion group reported a prior pregnancy, in contrast to one of the comparison group. The abortion group averaged 12.1 years of education as compared to 14.4 years in the control group. Almost 60 percent of the abortion group were college students or had recently finished college. The occupation of the head of the household was a white-collar one in 75 percent of the abortion group, compared to 85 percent in the control group. Analysis of the questionnaire data revealed that the abortion group had a significant difference in loss of one or both parents before the age of 18.

There were no significant differences in expressed religious preference; almost 75 percent of both groups described themselves as Protestants.

In response to close questioning about their knowledge of various types of contraception, more than 90 percent of both groups reported an accurate knowledge of at least three forms of contraception, as well as a fairly good idea of their relative efficacy. The mass media were the most frequently mentioned source of information about contraception in both groups, with school programs second and parents a poor third. Ninety percent or more of both groups also reported a knowledge of where and how to obtain contraceptives; neither group considered access to these methods of contraception any serious problem. The sexual activity of the abortion group (with the exception of a few who claimed that the pregnancy followed a single experience and a small group who were promiscuous) were generally confined to a single partner with whom there was a continuous pattern of sexual experience.

Seventy-seven percent of the abortion group reported no use of contraception prior to the pregnancy, while 82 percent of the sexually active members of the control group (35 percent of the entire group) reported consistent use of contraception. In the abortion group, rhythm was the contraceptive method most often reported as used prior to the occurrence of pregnancy, often in conjunction with the use of condoms or withdrawal by the male partner. Of 27 girls who reported any use of contraception prior to this pregnancy, only four reported use of the pill. Concern about the safety of the pill was not voiced frequently. Consistent use of male contraceptives was reported by only 35 percent of those reporting contraceptive use.

In response to questioning about the reasons for the nonuse of contraceptives, the answer most often given was "inconvenience" (15 percent). Another 15 percent of the group had conscious feelings of guilt about the use of contraception on a systematic basis. One young science student at a nearby university who had ample knowledge about animal and human reproduction answered our queries about her nonuse of contraceptive measures with an irate "What kind of girl do you think I am!" Another university senior had considered going to a physician in her hometown but was unable to do so because of her fear that her mother would find out. (She recognized this as a totally irrational fear since she was of age and knew that she could depend on the doctor's discretion.)

Another 15 percent of the group were clearly suffering from a severe acting-out character disorder, manifested by a rebellious, indifferent attitude toward the examiner, the nursing personnel, and their families, and frequently by a history of a hippie life-style. Many of these young women had left home, discontinued school, and were living with other disaffected youths. Their use of contraception was erratic and their sexual practice impulsive and casual. Sometimes the identity of the man who caused the pregnancy was unknown. Abortion was often seen as a concession to the family.

A third subgroup (ten percent) had a significant incidence of loss preceding the pregnancy. One young woman who was divorced and who had systematically

TABLE 1
Incidence of Menstrual Symptoms in Abortion and Control Groups, in Percentages

Menstrual Symptom	Abortion Group (N=99)	Control Group (N=79)
Irritability	78	78
Severe	7	14
Fatigue	63	60
Severe	4	12
Pain	80	77
Severe	25	30
Breast swelling	56	75
Severe	7	6
Abdominal swelling	70	80
Severe	10	17
Depression	66	74
Severe	11	16
Anxiety	42	39
Severe	10	20

used contraception could not explain her impulsive lack of such use prior to her pregnancy. Further probing revealed a still-birth during her terminated marriage; after mentioning this, she spontaneously wondered whether she was trying to prove something to herself by becoming pregnant again. Another patient reported that her pregnancy had followed a casual sexual experience that occurred shortly after a broken engagement. She had been sexually active during that relationship and had regularly used contraception. Only one patient reported a conscious wish to be pregnant prior to the pregnancy.

Menstrual symptoms (except pain) have been shown in prior studies to correlate with neuroticism. Of seven symptoms evaluated, only one was significantly different between the groups: a lower reporting of breast swelling occurred in the abortion than in the control group. However, the self-reporting of severe symptomatology at the menses revealed that the comparison group showed increased levels of irritability, fatigue, and anxiety; on all but one item, the comparison group reported a greater frequency of severe symptoms. (See table 1.)

On a global rating scale of menstrual distress, six of the comparison group reported that they spent at least one day in bed, while none of the abortion group so reported. Reported age at onset of menses was similar for the two groups.

Analysis of the Neuroticism Scale Questionnaire data revealed that on two of the five factors of the scale there were significant differences. The abortion group showed higher scores on the anxiety factor and also scored significantly higher on the "happy-go-lucky cheerfulness" factor. On total neuroticism, the distribution of scores was very similar; it was in the range of norms for the general population. On only one subfactor did both groups exceed the norms for the test. Both groups rated themselves dominant on the submissive versus dominant factor, indicating a tendency to externalize aggression.

DISCUSSION AND CONCLUSIONS

Our data strongly argue against the claim that lack of information about types of contraception and their efficacy or ease of access to contraceptive measures are major factors in the nonuse of contraception that contribute to the occurrence of a pregnancy. Forty percent of the abortion group revealed easily elicited conscious motivational factors that were significant in the explanation of their nonuse of contraception. Guilt and a fear of discovery related to conscious planning of sexual activity in the premarital state were reported most often.

Bauman (10), in a recently reported study of contraceptive practices among a random sample of undergraduate students at our university, reported similar data. Our comparison group comprised 35 percent nonvirgins, while Bauman's group was 50 percent nonvirgin. Seventy percent of his sample were juniors and seniors, while ours were almost all sophomores. Bauman's group also denied that information about or access to contraceptives was any problem. Among those in his group who were sexually active, only a third always used contraceptives; two-thirds most often favored such less effective contraceptive techniques as condoms (69 percent), withdrawal (67 percent), or rhythm (39.5 percent). Only seven percent reported use of the pill. The reasons most often given for nonuse were: intercourse was not expected (38 percent); intercourse occurred only during "safe" periods (22 percent); intercourse should be spontaneous (33 percent); and it was too embarrassing to obtain contraceptives (16 percent).

Our second subgroup among the abortion patients could be characterized clinically as having severe acting-out character disorders. Pregnancy in such persons is often an expression of hostility toward parents and their mores. This clinical impression is supported by the psychological test materials, which showed that the abortion group rated themselves higher on the "happy-go-lucky cheerfulness" factor, an aspect of which is a tendency toward impulsivity. This tendency, in conjunction with the tendency to externalize aggression, could be seen as making the pregnancy more likely. The increased anxiety ratings in the abortion group are not especially noteworthy, since all of the group were awaiting abortion by operative procedure or after injection of the saline solution.

Another subgroup seemed to be using the pregnancy as an attempt to deal with the narcissistic injury occasioned by a psychological loss—most often in a significant personal relationship. Analysis of our data does not reveal whether this subgroup was related to the subgroup that reported parental loss. A previous study (11) of delinquency in girls, however, noted that such delinquency is frequently sexual and also that there is an increased incidence of broken homes among such a group.

The lessened frequency of reporting severe symptoms at the menses would seem to support the findings of Gottschalk and associates that low menstrual disturbance may predispose to early impregnation. Pain, the one symptom reported in excess by the abortion group, was reported by Coppen and Kessel (12) to be unrelated

to neuroticism. Women with few symptoms at the menses are generally seen as less conflicted about the female psychosexual role and more likely to see pregnancy and motherhood as a source of gratification and self-esteem.

There appears to be little that we as psychiatrists can do to intervene in a preventive way when the pregnancy is the result of an acting-out tendency or when it occurs as a response to psychological loss.

While only 15 percent of our group revealed manifest guilt about sexual activity, the data of Bauman (10) seemed to indicate that perhaps this guilt is more widespread than our figures would suggest. Unfortunately, current programs on college campuses seem focused on the provision of information about contraception. On the basis of our data, we believe that while such programs may be desirable, it is far more important to emphasize counseling and educational efforts directed at the importance of young people making conscious choices about the kinds of relationships they are going to have with one another. This would seem a crucial educational issue for colleges to face, since most students are virgins prior to entering college and many become sexually active in a way that indicates their ambivalence about their sexual activity.

In this regard, Bauman reported that 80 percent of female virgins said they would not have intercourse even if a "perfect" contraceptive were available. He said his findings suggested that "the distribution of contraceptives on the campus will not produce widespread loss of virginity and promiscuity and it will not cause breakdown in the moral structure" (10). Findings such as Bauman's should do much to allay the apprehension of school officials about providing counseling and information programs. Our data also suggest that a careful evaluation of the reason for the occurrence of the pregnancy is important, since motivational factors of the kind we have described undoubtedly contribute significantly to the high recidivism rate associated with pregnancy among adolescents.

Finally, the psychological test data seemed to indicate that young women seeking abortion are no more neurotic as a group than nonpregnant girls their age, which suggests that time-consuming and expensive psychiatric evaluations can be dispensed with in all but a few instances. The necessity for these evaluations has often delayed the operative procedure. Routine evaluation of these patients also places a considerable load on already overloaded psychiatric facilities; it does not seem warranted in view of the many unfilled needs for mental health services.

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The Mystical Experience as a Suicide Preventive

BY PAUL C. HORTON, M.D.

Three suicidal adolescents suffering from schizophrenic reactions developed the ability to conjure up a mystical consciousness. Directly experiencing this "oceanic" state (or just its memory) provided the patients with a reliably soothing safeguard against their overwhelming loneliness and possible suicide. Recognition by the psychiatrist of the mystical state as a transitional phenomenon points the way to the most effective therapeutic stance.

> The world, with all its beauty, its happiness and suffering, its joys and pains, is planned with the utmost ingenuity, in order that the powers of the Self may be shown forth in manifestation.
>
> —ANNIE BESANT (1)

IN THE LAST TWO DECADES there has been a many-disciplined resurgence of interest in mystical and psychedelic states. Various explanations have been offered to account for this important change in Western society. Disillusionment with science (2), the decline of orthodox religion (3), a neoromantic denial of the validity of human culture (4), and a lack of socially relevant myths (5) are among the proposed sociological determinants. The purpose of this communication is to call attention to one function of the mystical state: its role as a suicide preventive. The function of such an experience appears to be extremely complex and variable among individuals. Bowers and Freedman (6) have indicated, for example, that the mystical state may function as a suicide precipitant. They also point out, however, that "the utility of such insight, the extent to which it is delusional or adaptive, varies not only in psychotherapy but in psychoses, drug states, and religious and mystical states" (6, p. 245).

I am presenting here three cases where the ability of the patient to conjure up the mystical state appeared to lessen, if not altogether abolish, the need for suicide. All three cases involved isolated, lonely, and severely depressed adolescents who had either left their nuclear family for the first time or were in the process of seeking emancipation when they had their first mystical experience. All suffered schizophrenic reactions attendant to their leaving home. None was in psychotherapy at that time. Two of them made more than one serious suicide attempt; the third had suicidal ideation and, although a conscious attempt was never made, he frequently placed himself in life-threatening situations. He also managed to suffer repeated gratuitous physical injury.

Thus there was in all three cases a definite pattern of self-injury in the face of threatened loss of symbiotic attachment. The three individuals learned to achieve repetitive mystical states (two of them with the assistance of hallucinogens), which they came to seek under stress. After acquiring this ability, none of them went beyond a suicide gesture to an actual attempt.

CASE REPORTS

Case 1. This intellectually brilliant and artistically creative 20-year-old girl was an only child born to parents in their late thirties. The patient's father was an academically ambitious and narcissistic man who remained aloof from his wife and child. There were over a dozen changes of address during the patient's school years, all in connection with her father's professional advancement. As a result, the patient had no opportunity to establish lasting and stable relationships with peers or adults other than her parents. The patient's mother resented her husband's disregard for her daughter's and her own feelings but was so conflicted about her sexual and maternal roles that she was unable to set limits. Consequently, she was grossly devalued by her husband and was an unsuitable identification figure for her growing daughter.

The patient, lonely and isolated, developed an imaginary companion when she was five years old. She kept this companion until she was in her early teens. There were many other transitional objects such as stuffed animals, pets, myths, fairy tales, and music, which helped to alleviate her loneliness. In fact, a large part of the patient's entire life had been spent in the transitional mode of experiencing.

When the patient was 17, she left home for the first time to study abroad. These were months of desperate loneliness; other than for her transitional objects, she had come to depend almost completely upon her parents for companionship and affection. An overwhelming sexual experience with a middle-aged man who reminded her of her father increased her sense of isolation and unworthiness. In a subsequent moment of frenzied loneliness the patient entered her first mystical state. She was astonished by this utterly fulfilling and infinitely varied inner experience. At first tentatively, then desperately, she sought to reexperience the inner "explosion." Unfortunately she discovered a "barrier" and a month later jumped off a building, breaking her back and nearly killing herself. She had experienced a complete upheaval of her personality that made it impossible for her and her parents to continue their previous symbiotic mode of relating.

After recovering from her first suicide attempt, the patient resumed her desperate search for her inner object of devotion.

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The author wishes to thank Drs. Henry Coppolillo and Peter Martin for their consultation in preparing this manuscript.

Several other suicide attempts (wrist scratching and drug overdosages) were made along the way as she entered psychotherapy and experimented with heterosexual and homosexual relations. Her first trip with mescaline, however, reopened the doors to her inner life and she reacted with: "Oh, my God! I've been here before." This was in reference to her first mystical state. Thereafter she became able to produce, largely at will, an inner state reminiscent of her first experience. Buttressed by this inner awareness she reentered psychotherapy. Unfortunately, she was unable to share this experience with a succession of therapists.

Case 2. A highly intelligent and sensitive 18-year-old boy had struggled most of his life to fulfill his father's extraordinary expectations. His father, a poorly integrated obsessive compulsive with strong unconscious homosexual yearnings, was bitterly disappointed with his own life and sought to relive it through his son's accomplishments. The son had not disappointed him until he left home for college and began to make choices of his own, particularly heterosexual ones. Boundaries between the two were poor and the father became panicky over the separation. Failing to persuade the boy to attend a neighboring university, the father mobilized the extended family to bring pressure to bear. This too failed and then the father's financial support was withdrawn. The son, conscious of the desperate struggle, resolved to separate. He managed to procure enough scholarship and loan money along with part-time work to maintain a financially independent existence. Emotionally, however, he was still very much tied to his family and suffered anxiety and depression of psychotic proportions.

During the ensuing months the patient had several automobile accidents as a result of high-speed, reckless driving; he barely escaped serious injury. A painful skin disorder requiring medical intervention was neglected. He badly lacerated his foot running barefoot through a field full of broken glass. He drank heavily, ate poorly, and lost much weight. This overall pattern of self-injury recapitulated the sixth through eighth years of his life when his parents were on the verge of divorce and were unable to show him much affection; numerous "accidents" and illnesses served to draw their sympathetic attention to him. There was one very serious "accident" that was probably a suicide attempt; the patient was unable to be sure of this due to the retrograde amnesia resulting from a trauma to his head.

Unable to retain his son in a symbiotic union, the father decompensated. He harassed the boy with every means at his disposal. He attempted, for example, to have the boy dropped from school due to "mental illness"; he sought a court order to force his minor son to return home; on one occasion he became physically assaultive; he made anonymous phone calls to his son, remaining silent on the line; he sent him unsigned "sympathy" cards; he attempted to drive his son's friends away by telling them how "ill" and "dangerous" he was. Under these pressures the patient developed a distinct, uncanny sense of "someone" looking over his shoulder and following him everywhere he went. Utterly terrifying nightmares plagued his sleep. The quintessence of these nightmares was a sense of complete annihilation that he would have difficulty shaking off for days at a time.

Far from home, lonely, afraid of and for his disturbed father, he began to pray. At first he recited prayers his mother had taught him. Finally, he just meditated by "clearing his mind." One night, exhausted and defeated, having nowhere to turn for solace, he had his first mystical experience: "It was like a fountain bursting forth. I felt a part of everything. And I died. When it stopped, I was changed. I felt limitless courage and strength and I was inspired to do great things. I wanted my life to become a continuous celebration of what I had found within." A few weeks later he was visited by a friend who had not seen him in several months. His friend was astonished by a profound change in the patient and told him: "If I didn't recognize your features, I wouldn't have known who you were. You are completely different. There is something about you—I can't say exactly what—that wasn't there before." The patient was able to resist his father's attempts to draw him back into the family circle, his reckless and impulsive behavior diminished, and he was able to seek out psychotherapy. Recurrent mystical states (not shared with his first therapist) gave him the "courage and strength to go on."

Case 3. An 18-year-old girl, the fifth of six children, had been deprived too early in life of a symbiotic attachment to her mother. Her insecurity was evident in her thumbsucking and bed wetting, which continued until she was 12 years old. Stuffed animals, pets, a blanket, and other transitional objects were in prominent usage until the patient was well into her teens. An additional instance of her transitional mode of existence is suggested in her description of her early religious training:

> I was brought up on what was a good dose of "religion." Church and Sunday school every Sunday, youth group once a week, religious instruction classes during grade school, Bible school in the summertime, Bible drills at home—I even taught Sunday school during my high school years, and I went to a Bible-centered college.

She enrolled at a distant college and began decompensating "out of sheer loneliness." She sought refuge in hallucinogens, which merely exacerbated her confusion and sense of loneliness:

> A major turning point came in my life January 15, 1969, when I mixed LSD-25 with alcohol. Bingo! I flipped out fast; it was hellish. . . . I even went so far as to try to kill myself. The only truth I knew was that I was, indeed, in a hopeless situation. Every other thought in my head was utterly distorted and warped.

A psychiatrist was unable to help her, and other suicide attempts followed. She said:

> Just to give you an idea how utterly alone I was in the madness of my mind, even since recovering, I still can't find a human being who has or could feel the pain, the fear, the hopelessness, nor aloneness, I felt then.

It was then that she experienced her "conversion":

> I remember looking around at the moment I understood I was forgiven past, present, and future, and saying, "Is that what it is? Oh, is that what it is?" How did I feel? Like a huge knot had been untied inside my head. For the first time in two months, I slept soundly and peacefully; without fear; I was filled with warmth and love for a living God.

In the subsequent two and a half years the patient has been a productive member of a campus religious organization and has made no further attempts on her life. Though still quite depressed, she appears to be continuously improving her life situation.

DISCUSSION

It is not the purpose of this communication to enter

into the complexities of the patients' therapies nor to elaborate upon the genesis of their mystical states. Suffice it to say that suicide or self-injury represented to them a way of attaining an absolute peace; the suicide wish appeared to be a product of the desire to return to the seemingly eternal safety of the warm, silent uterine world. Our understanding of primary narcissism and its forms and transformations makes it clear that the intrauterine mode of relating, characterized by passive receptivity, is an indelible part of the human psyche. Freud said, for example: "Thus we are entirely willing to acknowledge that the 'oceanic' feeling exists in many people and we are disposed to relate it to an early stage in ego-feeling . . ." (7). Kohut pointed out that "there remains throughout life an important direct residue of the original position [primary narcissism] . . ." and that the "oceanic feeling . . . is experienced passively . . ." (8). In a more metaphysical vein, Marti-Ibanez wrote: "The shadowy, formless, silent abyss of Nirvana is a state the mind could never comprehend without the subconscious memory of the uterine abyss" (9).

In reviewing the cases presented here, I am suggesting that residues of primary narcissism may represent the human being's last refuge in life's storms—short of suicide. Schizophrenic and borderline individuals sometimes imagine, perhaps erroneously, that suicide will return them to a state of mind equivalent to primary narcissism. They are often unable to carry on the sort of internal dialogue that made Hamlet hesitate. In any event, one alternative to suicide may be the mystical state: the oceanic experience that seeks, as Freud supposed, "to reinstate limitless narcissism" (7).

In each of the cases presented, there was a history of one or more extremely intense initial oceanic experiences. Numerous attenuated experiences followed; these were largely under the patient's control. Vague reverberations of the experience inspired hopefulness. Suicide attempts and other flagrantly self-injurious behavior disappeared. The patients then sought psychotherapy. Thus the ability of the patient to conjure up the mystical state came to be a safeguard against overwhelming loneliness and resultant suicide.

THERAPEUTIC IMPLICATIONS

Many psychiatrists recognize the importance of taking a special therapeutic stance vis-à-vis the mystical experience (6, 10–13). Bowers and Freedman stated: "It seems apparent that the reaction of the therapist or other significant persons in the environment could crucially affect the course and resolution of such states" (6). Braceland (10) and Kelman (11) called for recognition by psychiatrists of the validity of man's spiritual nature as a therapeutic ally. Dean (12) encouraged the development in patients and therapists of an awareness of the "ultraconscious." Eisenbud (13) gave many examples of how recognition of transcendent modes of communication (the "PSI Hypothesis") provides the therapist with greater clinical and theoretical leverage.

I have found it useful to regard the mystical experience as (among other things) a potential transitional phenomenon. Thus I treat it as a reliably soothing inner experience with maturational potential (14, 15). I do not regard it as simply another manifestation of the patient's "craziness": a delusional network to be untangled (as has been suggested to me by some of my colleagues). All of the patients described here had been in treatment with psychiatrists with whom their mystical experiences were not shared. Two of them felt that their previous psychiatrists were either inimical to the experience or "just not interested." This may or may not have been the case; in any event, all three patients had deep and abiding fears about the potentially "crazy" nature of their mystical experiences and were alert to any sign from the therapist that he too did not approve. In two of the cases, my acknowledgment with the patient of the very special character and centrality of the experience led to its accessibility for therapeutic purposes. For this reason the therapist would in my opinion be ill-advised to aggressively challenge the reported mystical state.

Winnicott said of the transitional object: "Its fate is to be gradually allowed to be decathected, so that in the course of years it becomes not so much forgotten as relegated to limbo" (15). The same is true, one can hope, for the mystical experience insofar as it serves as a suicide preventive rather than as part of a healthy religio-philosophical life-style. The therapist can best facilitate this decathexis by himself becoming a transitional object, thereby providing a reliably soothing, nurturant, reality-oriented relationship.

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Aggression and Social Synergy

THE VIOLENCE ABROAD IN THE LAND is restricting living space. The variety and increase of aggression inflicted upon the citizenry at this presumably late stage of civilization require no documentation. The trend is toward direct action, with many a basal ganglion tuned for combat.

René Dubos's design for living (1) that would provide the opportunity for invigorating walks in a pleasant and unpolluted atmosphere is beyond conceiving. Better to bolt the doors and stay off the streets, although it remains relatively safe to sally forth ensconced in a ton of steel, and safer still in these chargers with doors secured. But the automobile has become part of the problem, as indicated by the mounting mayhem rendered by knights of the road in their twentieth-century armor. Destructive forces are ubiquitous (2) and deserving of consideration in debate about the human condition. The pressing questions are: Why is aggression a prominent feature of society today? and What can be done about it?

In his fascinating book *The Human Agenda* (3), which I will excerpt liberally (by courtesy of author and publisher), Gorney develops the thesis of *social synergy* as best oriented to reduce the burgeoning aggression that plagues us. He marshals the evidence that violence is learned and not innate or instinctual as Lorenz (4), Dart (5), and Ardrey (6) would have us believe.

The anthropologist Ruth Benedict (7) spoke of cultures with low synergy as those where a social structure provides for acts that are mutually opposed and counteractive, and of cultures with high synergy as those where there is social provision for acts that are mutually reinforcing. Building on the work of Benedict in comparative sociology and Abraham Maslow's elaboration of it (8, 9) the conclusion emerges that societies where nonaggression is conspicuous have social orders in which the individual by the same act and at the same time serves his own advantage and that of the group. *Nonaggression occurs not because people are unselfish and put social obligations above personal desires but because the social arrangements make these two identical.*

Benedict showed that human societies with low social synergy arrange their relationships so that the advantage of one individual becomes a victory over another, whereas in societies with high synergy the advantage of one individual becomes a victory also for the group. Competition, the hallmark of industrial society, loses primacy in societies where social synergy is high. She also showed that a society with low synergy tends to concentrate riches in a "have" group, rather than dispense them widely. In such a society the only security lies in having more than one's neighbor. This system drives its members toward competition—one must outdo another; better yet, undo him.

As Benedict pointed out, anxiety that develops so luxuriantly in societies of low synergy is absent to a degree that seems to us incredible in those of high social synergy. Goodwill is preeminent in the latter, and murder and suicide are rare or actually

In this section, the Editor samples varied opinions on topical problems. The opinions expressed herein are not necessarily those of the Editor, nor can they in any way be construed as marking the official policy of the Journal.

unknown since the universe is not seen as threatening and one does not have to snatch and grab to maintain oneself. Benedict was working with an assortment of so-called primitive societies, and we need to know if her work on social synergy and aggression is applicable in Western society.

In *The Human Agenda*, Gorney marshals evidence that it is. In examining the work ethic, which was crucial in the Benedict study of aggressive and nonaggressive societies, the alienation is not so much due to what Karl Marx noted as the stifling of the individual's potential by techniques to make production more efficient; rather it is scarcity that causes the alienation. In Gorney's thinking, humans were so driven by scarcity that they were not free to develop a psychically intimate relationship to work. He gives much evidence that competition is highly correlated with aggression. Equanimity is fostered by being paid for what one likes to do.

Only currently, in the new era of abundance, is there a possibility that the majority will no longer be driven by survival needs and alienated from work. They will have the opportunity to select the sort of activity that yields the award of self-validation. The only way to secure the self-validative benefits with work is to do work that one wants to do without the compulsion of necessity. Of course, it is quite possible in these times for a person to be engaged in both types of work—a job to make a living and likely to be temporary, and at the same time work he likes to do and that will afford the opportunity for continuing growth and advancement, in other words self-validation. Bilateral occupation is seen particularly in young people working toward a profession, often in a supporting job while they are going to school.

The central fact of today's human revolution, as developed by Gorney, is that we are leaving the old era of scarcity for a new era of abundance, so that we are faced with the outmoding of the entire fabric of values based on scarcity. Young people increasingly reject as inauthentic and hypocritical institutions that they perceive as currently following obsolete values instead of those pertinent to present reality. One of the latter is a way of life that permits people to satisfy individual needs and those of the group by the same acts, characterized in general by Benedict's term "high synergy."

Competition and aggression are far less significant in the history of the relationships of all living creatures than are cooperation and love. The time has arrived when all human beings in their work, love, and play can shift from their central social functions of assuring survival to their crucial psychological function of promoting optimum growth of human personality. One must agree with Gorney that we need to foster the kind of personality that surveys its place in the human agenda and lovingly sets about raising human life to new levels of consciousness and joy while maintaining the grace and courage to live without final certainty.

We are at the stage of social and economic development where human values must be guided to assure man's survival. Surely mere observation, documentation, and repression of the aggression that has come to the fore is not the way of survival.

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BRIEF COMMUNICATIONS

The Effect of Financing on Psychiatric Care

BY ROBERT W. GIBSON, M.D.

There will probably not be a single system of payment to physicians under national health insurance, but it seems likely that the option of obtaining care through an organized system such as a health maintenance organization will be mandated. The author discusses the pros and cons of such organizations and how mental health services might operate within them. He urges psychiatrists to assume an active role in determining what psychiatric services are needed in this country and how they can best be delivered.

THE PAYMENT MECHANISM is increasingly being used to bring about changes in the health care delivery system. Thus our interest in how psychiatrists will be paid in the future should not be limited to the monetary impact. Of equal or even greater significance are the implications for the future practice of psychiatry.

The most familiar method of payment in this country has been the fee-for-service method. Under this arrangement the patient has a free choice of physician, who then determines what services are needed and what he will charge. This essentially private transaction has some influence on the practice of medicine but it is highly variable and impossible to control in any systematic way.

With the increasing role of third-party payers has come a greater potential for the fee-for-service payment to influence the health care delivery system. Third-party payers can define benefits, set standards, and impose requirements on providers in as much detail as they choose and to the degree that their subscribers will tolerate. As health insurance programs have grown in size, the influence that the third-party payer may exercise has increased. Third-party payers have been reluctant, however, to utilize this power. After all, they must satisfy their subscribers and are to a degree dependent upon the providers.

Read at the tenth western divisional meeting of the American Psychiatric Association, San Diego, Calif., October 5–8, 1972.

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The federal government, sensitive to the possible charges of socialized medicine, has moved rather cautiously into the field of controlling the health care system. For example, in the Medicare legislation (Title 18 of the Social Security Amendments of 1965), the very first sentence states: "Nothing in this Title shall be construed to authorize any Federal officer or employee to exercise any supervision or control over the practice of medicine or the manner in which medical services are provided. . . ."

Health insurance programs have typically provided limited or no benefits for psychiatric treatment. Thus, third-party payers have had less influence on psychiatric care than they have had on health care generally. Coverage for outpatient psychiatric care has been especially meager, so most psychiatrists in private practice, at least until recently, have experienced relatively little outside pressure on their practice.

As one reads the legislative proposals and the rhetoric of national health insurance, it is clear the mood has changed; there is no disclaimer such as appears in the Medicare legislation. On the contrary, the advocates of most of the proposals forthrightly assert that it is their intent to make drastic changes in the health care delivery system. It would be tempting to digress here to debate the criticisms of the health care system, the sources of the problems, who is to blame, what changes should be made, and so forth. But I want to avoid that in order to concentrate on the process through which financing affects psychiatric care rather than on the content of the proposals.

In varying degrees all of the national health insurance proposals advocate change: better planning, better coordination, cost containment, and a mechanism for exerting continuing control of the health care system. There is, however, no significant support for establishing a national health service under which the government would own the facilities, hire the personnel, choose the locations for dispensing care, and pay through taxation whatever costs this requires. Failure to pursue this route is not dictated just by political necessity; there is genuine fear of the problems and abuses that can occur in the large bureaucracy of government medicine.

Thus the strategy has become one of devising a scheme

of incentives and disincentives to influence patterns of practice. Put very simply, the technique is to make it economically advantageous for a physician to do what someone else thinks he ought to be doing and disadvantageous for him to do those things which someone else thinks he should not be doing. Such approaches can have only limited impact because physicians are influenced not only by economic considerations; they are strongly motivated by ethical considerations, intellectual and scientific curiosity, the attitudes of their peers and professional groups, and a dedication to human service.

The forces involved in changing the health care system are complex and dynamic. In particular we must reckon with the political process. For example, the proponent of a particular piece of health care legislation, while he believes in the merit of his proposal, may also be utilizing the proposal as a campaign issue in his quest for high office. And for every identifiable force there tends to develop a counterforce, and the end result is difficult to predict.

There will probably be no single system of payment. "Monolithic" is a bad word; "pluralistic" is considered an essential characteristic for solutions to the diverse problems of our society. In many instances, however, the emphasis on pluralism is used to reassure the individual whose mode of practice is under attack. Nevertheless, it does appear that many options will be available, although some will be more attractive than others.

ORGANIZED DELIVERY SYSTEMS

If we accept the premise that the payment mechanism is going to be used as the main instrument to accomplish change, then it is essential to know which way the winds of change are blowing. With no unanimity on any issue, the outcome is bound to be a complicated compromise of diverse points of view. There does appear to be consensus that the consumer should have an opportunity to get his treatment through an organized health delivery system offering a comprehensive range of services for a fixed prepayment on a per capita basis. One such approach is the health maintenance organization; there are many others such as health care corporations and health service organizations; also, a community mental health center can qualify as an organized delivery system.

Most proposals would require the large purchaser of health services such as an employer or government to offer subscribers a health care organization option. Many proposals provide financial incentives for this by making the benefits greater when they are received through an organized delivery system. For example, H.R. 16154, a bill "to provide adequate mental health care and psychiatric care to all Americans," requires benefits for "mental health care or treatment which is of an active preventive, diagnostic, therapeutic, or rehabilitative nature, except that the number of such visits for which payment may be made during any benefit period shall not exceed twenty unless the physician to whom the visits are made is participating in a group health program approved by the Secretary." Obviously this is intended to encourage patients to seek treatment from such a program and to induce psychiatrists to become providers in such a program.

Many arguments have been put forward in support of the organized delivery system. It is asserted that it will make services more accessible since enrollees are guaranteed not only primary care but a range of specialist and other services. Attempts may be made to use such a system to achieve a redistribution of manpower. But the argument given the greatest weight is the belief that, through organized plans, health care can be provided at lower cost than it can through solo practice. This will continue as a controversy for many years, but while the debate goes on there will be strong inducements offered for the development of organized group prepayment plans.

Some advocates of these plans believe that health professionals make too much money and hope to limit income through controlled salaries. But many see the size of the individual physician's salary as a minor cost factor and believe the organized system will accomplish most of its savings through better coordination, avoidance of duplication, and elimination of overutilization. They are less concerned about the specific charge for a given service and more concerned about the total costs to treat a given health problem. Obviously if a health problem can be treated earlier, more effectively, and more rapidly—or prevented altogether—there should be a saving.

The prepayment scheme, while discouraging unnecessary services, could also be an inducement to withhold needed services. While one saves money by preventing illness one can also save money by letting the patient die. In practice the withholding of appropriate treatment has not been a serious problem. By training and interest, physicians are so strongly oriented toward caring for patients that it is unlikely that they would deliberately withhold needed services. Furthermore, peer review techniques can be built into organized health programs to ensure quality care as well as proper utilization. In many plans the consumer is given a strong voice. In some instances the subscribers actually own and govern the plan so that, in effect, they employ and exercise a degree of control over the health professional.

HOW THE PROGRAM MIGHT WORK

I would like to take a closer look at how the organized health program can affect a physician's practice. The usual plan starts out the year with a set number of subscribers paying a predetermined amount regardless of the services to be rendered during the year. Obviously costs will be reduced if the plan holds down services and uses less costly services. It is hoped that this will lead to the promotion of health rather than just the treatment of illness.

In most legislative proposals there is no explicit requirement as to how physicians must be paid within such a plan. In general, however, the trend is toward a salary,

with sometimes the addition of a bonus based on the economic performance of the plan. As a new plan starts up, the services of specialists must often be on a fee-for-service basis because the number of subscribers is not sufficiently large to warrant a full-time specialist. As the plan grows there will be obvious advantages to hiring a specialist (say a psychiatrist) on a part-time basis; later the psychiatrist could be full-time and, even later, when the number of subscribers becomes sufficiently large, a department of psychiatry may come into being. A salaried psychiatrist in a plan might concentrate on consultation and diagnosis, and refer patients to private psychiatrists who have agreed to participate in the plan at a specified fee for service, to meet the plan's requirements for record keeping, to accept peer review, and so forth.

It is anticipated that within organized care systems the bulk of mental health services may be provided not by psychiatrists but by allied mental health professionals and newly emerging types of mental health workers. It is to be hoped that efforts will be made to maximize the skills and sensitivity to psychiatric problems of *all* the health workers within the program, so that mental health care becomes a part of total care. Many models will undoubtedly be tried. Careful evaluation and close collaboration will be required to find the mix in a given program that will maximize quality care, find consumer acceptance, achieve cost effectiveness, and offer satisfaction to the mental health professional.

How soon is the trend toward organized health plans going to affect psychiatrists? That depends on what legislation is passed, how well the plans work, the willingness of health professionals to participate in them, and a host of other factors. Many experts in the health field believe that within the next few decades solo practice will practically disappear and that organized health programs will become the predominant system of health care.

It is impossible to foretell, and predictions about psychiatry are especially uncertain. Typically the prepayment plans have offered only limited or even no psychiatric benefits. Current proposals vary but most have restrictions on the kinds and amounts of psychiatric services, with a heavy emphasis on short-term intervention. In some plans psychiatric treatment would amount to little more than first aid. Thus psychiatric care may lag behind in any shift toward organized health plans.

It has been argued that if psychiatrists like the status quo they should discourage the inclusion of mental health benefits in national health insurance. I cannot accept that position. There are many serious gaps in our system of psychiatric care: emergency services are seldom available; many high-risk groups such as children, the elderly, and the poor do not get what they need; and not enough is being done in the area of prevention.

If our government and our society are going to make good on their commitment that adequate health care is a right, psychiatry must assume a positive leadership role. Otherwise the discrimination and abuses that have plagued our efforts to help the mentally ill will be perpetuated. Psychiatric services will be provided in some form or under some guise, by someone, regardless of what benefits are written into legislation. As psychiatrists we are in the best position to determine what is needed, to plan how services should be delivered, and to judge their quality and effectiveness.

How psychiatrists are paid will determine how patients will be treated.

Peer Review: Prospects and Problems

BY DONALD G. LANGSLEY, M.D.

Peer review is now mandated for the treatment of all patients covered by the Medicare and Medicaid programs. Utilization of services—especially inpatient services—will be controlled as norms of treatment by age and diagnosis are developed. Psychiatrists, working through district branches, are encouraged to develop guidelines for peer review in line with a recent APA position statement. In doing so they must be concerned about protecting the confidences of the patient and about threats of litigation.

THE ENACTMENT OF THE Social Security Amendments of 1972 (H.R. 1) makes peer review a reality rather than a prospect. This far-reaching legislation covers many areas; one of the most important is the establishment of Professional Standards Review Organizations (PSROs). The law states that the purpose of the PSRO is to assure

Read at the tenth western divisional meeting of the American Psychiatric Association, San Diego, Calif., October 5–8, 1972.

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that services conform to appropriate professional standards, that payment is made only when the service is medically necessary, and that inpatient services are used only when outpatient treatment will not accomplish the purpose. By January 1, 1974, the Department of Health, Education, and Welfare will establish areas and designate a nonprofit professional organization to be the PSRO for each area. Each PSRO will be responsible for reviewing the professional activities of physicians, other health care practitioners, and institutional or noninstitutional providers. Each PSRO will determine the standards for elective admissions and may require prior approval of such admissions. PSROs will arrange for patient and physician profiles and will collect data so as to develop norms of care, diagnosis, and treatment based on typical patterns of practice in the region. These norms will include length of hospital stay by age and diagnosis as a principal point for evaluation and review.

When the system is under way, each physician treating Medicaid or Medicare patients will be required to execute a "certificate of need" if he wants his patient to receive care beyond the 50th percentile of length of stay for patients in the same age group and with a similar diagnosis. He will have to provide sufficient information to justify approval by the PSRO.

To the administrator, peer review is a way of controlling expenditures. It is a process that focuses on the utilization of health care services, highlighting the unusual hospital stay or the longer-than-average type of treatment. Although peer review embraces the concepts of both quality control *and* utilization review, utilization is easier to assess than quality. One of the assumptions in utilization review is that poor quality care will surface if the treatment is prolonged or unusual. For the most part, utilization review committees have been connected with hospitals, since inpatient treatment is far more expensive than any other modality. Review of ambulatory or office treatment is just beginning to come under consideration.

To the physician there are many concerns. He has had a history of independent practice with little interference or external supervision. Protection of the public has come from licensure proceedings, the actions of professional societies, and the threat of malpractice suits. Today, however, when health care is increasingly funded by third parties, the psychiatrist can anticipate that the fiscal issues will be increasingly visible. Psychiatry is now engaged in an educational process to demonstrate to government and to insurance carriers that it is economically feasible as well as medically necessary to provide equal coverage for psychiatric illness. As a result of the tradition of exclusion rather than equal coverage, insurance companies and government agencies have expressed concern about the cost of psychiatric treatment. They already have and will in the future want to limit the total benefits as well as the disorders for which treatment is provided. In spite of compelling evidence (1), they will continue to claim that psychiatry presents opportunities for misuse of services that need special attention and supervision. This is why peer review ought to be of particular concern to the psychiatrist.

Some groups have suggested that peer review ought not to be left to physicians. This follows the reasoning of those who say that health care is too important to be left to doctors. The proposal that there be public control or nonprofessional determination of what constitutes necessary treatment is frightening. Our concern is for the well-being of the patient rather than the economic security of the psychiatrist. One of the disadvantages of our profession is that every human being considers himself an expert in human behavior. It is not uncommon to have the layman consider himself capable of judging what is normal or abnormal behavior and how to treat it. We envy our internist colleagues because of the quantification that laboratory tests provide in diagnosis. Our own science is more subject to human interpretation. For that reason alone psychiatry is likely to be more than ever the object of scrutiny under the peer review process.

APA PEER REVIEW GUIDELINES

Peer review has been one of the major concerns of the American Psychiatric Association. A task force has developed guidelines for the peer review process.[1] The guidelines recommend that district branch peer review organizations work closely with local medical peer review organizations. In California this is already occurring: private psychiatrists have worked closely with the county medical societies for some time. These societies have been among the leaders in the foundation movement; the medical care foundation itself has often been the locus of peer review. In Sacramento County, for example, our county medical society has an active peer review process in which admissions to the hospital, when the care is being funded by Medi-Cal or certain types of insurance, receive prior authorization through a program called Certified Hospital Admission Program (CHAP). The CHAP effectively utilizes local controls over unnecessary hospitalization and unnecessary length of stay. In the Central California district branch (the Central California Psychiatric Society), we have taken the position that the peer review process can most effectively be carried on within the local medical societies; there is a close working relationship between the county medical society and the APA district branch.

No peer review process will be truly effective if each county has a committee whose determinations are made purely on the basis of personal experience or bias. If peer review is to be effective, there must be some consistency in the guidelines for such committees. More important, the peer review process should reflect current practice in the area. In brief, guidelines must be established that will reflect how psychiatrists within a given area generally treat patients with a given illness, and the job of the peer review organization (or PSRO) is to determine whether

[1] See "Position Statement on Peer Review in Psychiatry," page 381 of this issue of the *Journal*.

the proposed treatment generally falls within those guidelines. These are the procedures that H.R. 1 requires; the same approach is recommended in APA's position statement on peer review in psychiatry.

While the development of guidelines for the practice of psychiatry is more difficult than the development of those for the practice of surgery, we might do well to look carefully at the administrative procedures of our surgical colleagues. They have done an excellent job of defining what their procedures and practice are, of establishing agreement on what constitutes an acceptable standard of practice, and of ensuring that insurance plans include benefits for illnesses that require surgical procedures. They are less concerned than psychiatrists about confidentiality; it is of little concern whether an individual undergoes an appendectomy or a cholecystectomy as long as he recovers and functions as he did before his illness. In psychiatry we are only too aware of the lingering stigma about psychiatric treatment. The patient who has had psychiatric treatment may be denied the opportunity to run for Vice-President of the United States or may be denied a driver's license or may have a hard time getting into college. There are various other subtle problems associated with a history of psychiatric treatment. The content of the treatment often deals with highly charged personal data that psychiatrists feel require a high degree of confidentiality.

Nevertheless, if one takes into account the variations in practice and the need for confidentiality, similar principles can be applied to establishing criteria for psychiatric practice as for surgical practice. The first step consists of defining specifically what the psychiatrist does in his treatment. This means classifying all the acceptable treatment procedures, including individual, group, and family psychotherapy and the various somatic therapies and stipulating an appropriate amount of time or effort involved. This is the approach of the Relative Value Scale: a committee is currently working in California to establish the relative values of all psychiatric treatment procedures. The next step is to determine what treatment is used for various kinds of patients and disorders. Information on publicly funded programs is available from the California Department of Mental Hygiene, and similar information is contained in the files of various insurance carriers. But it is difficult to get information from the private practitioner. He has justifiably been concerned about releasing data concerning his patients because of the confidentiality problem. In general, he has learned to distrust government agencies and would understandably be reluctant to give data on his private patients unless he feels that adequate safeguards are being enforced to protect the patient and that also take into account his own role as a private practitioner.

In the opinion of many, the only organization in which the private practitioner will have confidence is his professional society. The Central California Psychiatric Society has voted to develop a plan to collect data on the treatment of patients by privately practicing psychiatrists. This program will be sponsored by the district branch and have access to the facilities of a university and its medical school, including a computer center and data processing equipment. We are developing a system that will protect the identity of the patient and yet will offer the private psychiatrist information about the standards of practice in his own area. From such standards of practice, general guidelines can be developed for the work of peer review organizations.

It is far too early to make any predictions about how effective such guidelines will be. But we are all aware that a system will be imposed on us if we do not develop one ourselves. We have a choice at this time in arranging standards of practice and procedures for the care of the mentally ill that will offer patients the best possible treatment. The alternative is that a government agency or an insurance carrier will develop standards without our participation. The Ann Arbor Professional Advisory Survey is one example. In that survey, the average length of hospital stay by diagnosis and age group was established from data supplied by a number of general hospitals throughout the United States. But the data included patients who were admitted to general hospital units only for processing before they were sent on to private psychiatric hospitals or state mental hospitals. As a result, the average length of stay was very short; it was clear that the figures related not to definitive treatment but rather to diagnosis, evaluation, and disposition. If standards were adopted in this way they would do a great disservice to patients with mental disorders.

NEED FOR SAFEGUARDS

The peer review mechanism must also develop safeguards for the patient and the psychiatrist. As already noted, the peer review process must be carried on in such a manner as to completely protect confidential information. Another concern is that psychiatrists serving on review committees may be sued by patients or providers. It is also human nature to expect criticism from colleagues. Perhaps such problems can be minimized by persuading the most experienced psychiatrists in the community to serve on the Professional Standards Review Organizations (PSROs) and by rotating their membership. In addition, legal safeguards against litigation must be developed. Another potential problem may arise if the findings of PSROs become the basis for malpractice actions or other suits. If a PSRO disallows a treatment procedure, can this be construed as an indication of malpractice? Does the PSRO then become the expert witness for the plaintiff? Fortunately, H.R. 1 protects the patient, the reviewer, and the records. Those providing information to a PSRO cannot be held civilly liable, nor can members or employees of PSROs be held in violation of criminal or civil law as long as due care is exercised. H.R. 1 also provides that no practicing physician will be held liable on account of an action taken in compliance with or reliance on professionally developed norms, provided he exercises due care in all his professional conduct.

Peer review is now a reality. The APA position statement on peer review in psychiatry is, in my opinion, a document deserving of close study and effective implementation by all district branches and members of the American Psychiatric Association.

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A Preliminary Report on Multi-Image Immediate Impact Video Self-Confrontation

BY MILTON M. BERGER, M.D.

A multi-image closed-circuit video self-confrontation with deliberate distortion of some of the images is presented to patients for immediate impact during psychotherapy. Seeing the distorted images alongside the clear image serves to elicit free associations about past or present self-concepts and introjections, which may then lead to significant clarification and insight into the self in the here and now. The technique is not proposed as a form of therapy by itself or as a substitute for analytic psychotherapy, but rather as an adjunct to be used in appropriate contexts.

THIS IS A PRELIMINARY REPORT on a new technique, multi-image immediate impact video self-confrontation, that I have used in psychotherapy to stimulate the emergence of repressed free associations related to self-images and injunctive messages incorporated early in life. H.S. Sullivan very succinctly stated that the repeated, reflected images of our selves that we receive from others early in life determine our self-image and self-concept (1). Many other workers in psychiatry, e.g., Freud, Adler, Jung, Horney, Fromm, Kubie, Spitz, Lewin, and Ives-Hendricks, also focused their attention on the development of self, self-concepts, idealized self-image, potential self, actualized self, real self, and fulfilled self. Some, like Horney (2), developed unified theories to explain the basic anxiety and the early life experiences that not only cause alienation from self but also cause energies to be dissipated in neurotic attempts to create an idealized image of self.

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EQUIPMENT AND TECHNIQUE

Through serendipity, a long-standing interest in intrapsychic and interpersonal communication systems, and some years of experience with the use of video equipment in psychotherapy (3), I recently learned how to produce a number of clear and distorted self-images in tandem for self-image confrontation.

The technique requires the following minimum equipment: one videotape recorder, two mobile cameras with zoom lenses, two monitors, one split-screen special-effects generator, and one or more microphones. I bring to the patient's attention from two to six or more partial images of himself on two or more closed-circuit monitors while these pictures are being videotaped for immediate or later replay. As they are being presented in tandem series on the monitor, the pictures intermittently become more distorted or blurred through the movement of the camera, or by my increasing or decreasing the light aperture of the lens or altering the focus, or through a combination of these (see figure 1). A patient may be lying on the couch in traditional psychoanalytic fashion or sitting up, or he may be in an interaction with members of his psychotherapy group or family during this video experience.

Through electronic means I, as the therapist, have an ability to magnify, focus on, and distort some of the pictured aspects of a patient's image, just as people do to themselves with their inner "I" and "eye." I can then play back the recording made just moments before, to produce a deeper, more complete experience and greater free association to what is triggered by seeing a clear and a distorted self-image alongside each other. There is both an enlarged, objective, observing ego at work and an expanded, subjective, recognizing, identifying self, along with increased receptive strength (4) as the patient feels "at home" with those images or pictures or aspects of self now emerging on the monitors as stimuli.

FIGURE 1

*Two Examples of Multi-Image Closed-Circuit Pictures in Tandem, with Images Ranging from Clear to Distorted**



*The author is pictured in these examples.

RESULTS

Forty long-term patients I have seen in individual and group psychotherapy in private practice, most of whom had a diagnosis of character neurosis, have had one or more ten- to 45-minute experiences with the type of multi-image confrontation described here. One 49-year-old woman, depressed and emotionally impoverished, with lifelong suicidal tendencies, stated that she had no response to seeing herself. All the other patients had free associations that were highly significant in terms of what became available for working through or for the ongoing assessment of progress in therapy. There were no immediate or delayed harmful effects, although 70 percent (28 patients) spontaneously referred to memories of the experience in the following weeks. The multi-image experience served as a marker or milestone in the way it became imprinted, and patients referred back to it at unpredictable moments.

The experience has been described by different patients as "surrealistic," "objectifying," "reflection in action," "really taking a look at myself," and "being surrounded by myself." It is seeing the shadow-like, unclear representations of self-images in tandem after a clear image that stimulates associations to deeper introjections, identifications, and incorporations. These have functioned as the inner psychic "complexes" or selves described by Jung (5) that have vexed the patient-person for so many years while remaining elusive, inconstant, and not quite palpable. Patients now have a chance to become more clearly aware of and to grasp these "personas."

CASE REPORTS

Case 1. Mrs. P., a 27-year-old sociologist who had always felt victimized, reacted with antipathy, disgust, pain, and moaning anguish to multi-images of the front of her face, although she squealed with spirited delight and self-acceptance as she turned to her left and saw images of the right side of her face. During a profound abreactive experience she then stated in her free associations that in the front views she saw the faces of her mother and grandmother in herself. She saw them as washed out, drained, depressed, old, lifeless, and really miserable, and could see and hear her mother's injunctive message to her. "Don't try to be any different than me 'cause you won't make it . . . and if you're not going to make it, don't try! Don't even bother. You'll be a sorry girl if you do."

Case 2. Miss J., a 25-year-old secretary, self-effacing and repeatedly self-defeating, sat quietly reflecting on her self-images during a group session. She murmured, "The image on the left is clear. That's probably how I seem to others, but I don't see myself that way. I see myself blurred and hazy like in the third image." When questioned as to what was threatening in seeing herself clearly, she responded, "Then I'd have to be responsible for myself."

Case 3. An alienated 32-year-old divorced account executive asked, "Is it possible to be possessed? I see my mother's face in my face on the monitor. I suddenly realize she never let me be myself. As a child I always wondered what was wrong with me because I felt confused and didn't know where and who I was."

Case 4. Mr. R., a 40-year-old detached and alienated executive with few memories up to age 12, said, "As I look at the images getting smaller and smaller, it's as if I'm going back into my childhood . . . to being nothing."

Case 5. Miss L., a 30-year-old opera singer concluding four years of successful psychotherapy, remarked, "I see the clear image as the me I am now and the ones coming up blurred as the ones of my future as I continue to develop my potential."

Case 6. Mr. A., a successful interior designer aged 35, commented on his dislike of video because he often saw the right side of his face, which he disliked. He felt it was feminine and was the "sissy" in him remaining from having grown up as a "mommy's boy." Moments later he recalled with insight and relief the fact that it was his right testicle that never descended.

Some patients were startled to learn that it is the distorted picture of the self that feels familiar and is the way they usually perceive themselves.

CONCLUSIONS

The multi-image method described here is another step in the long evolution of techniques developed to serve as adjuncts in expediting the recall of events and thought-feeling associations that can lead to catharsis, insight, and the surrender of psychosocial self-images or emotional fixations that retard growth and maturation. The technique is not presented as a form of therapy per se or as a substitute for analytic psychotherapy.

It is necessary to review and consider revision of theories of the self that regard man from a rigid viewpoint. Although there is continuity in the structural core of each person, the self is not a concrete self but is experienced as being composed of multiple layers or cores within cores (6). A maturing person is composed of many co-existing selves or self-aspects, changing and in flux from moment to moment, yet always having a unifying matrix of a physical body mass, name, gender, life history, incorporated cultural time-binding practices, language, values, and emotional reaction patterns. Each person is unique in his process of creatively synthesizing clear and distorted past and present images that are introjected and identified with as they are amalgamated into his own growing self.

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Phenothiazine Deaths: A Critical Review

BY ROGER PEELE, M.D., AND IDELLA S. VON LOETZEN, M.A.

To determine whether "phenothiazine death" is a valid entity, the authors examined case studies in the literature for other explanations of these sudden, unexpected, autopsy-negative deaths. The results of their comparisons of a large number of phenothiazine deaths and deaths due to lethal catatonia raise doubts as to the validity of phenothiazine death as an entity.

DR. LUTHER BELL of McLean Asylum in Massachusetts 123 years ago presented to the Association of Medical Superintendents of American Institutions for the Insane a paper concerning ten patients who died suddenly and whose autopsies failed to reveal an adequate explanation for their deaths (1). Because of his article, the term "Bell's mania" was used to describe this entity. Later, it was more commonly called "lethal catatonia," although it was also given such other names as "exhaustion death" and "deadly catatonia."

A typical history was that of a patient who had initially undergone a personality change over a period of weeks, followed by hyperactivity, delusions, and hallucinations. This picture continued after hospitalization and, in addition, there was sometimes a high fever, more than 108F in a few cases. After several days, weeks, or months, the patient would be found dead without any advance warning (1–12). We want to emphasize that there were cases described that were at variance with this picture. Some cases were chronic, some patients did not have hyperactivity, many patients did not have hyperpyrexia, and some patients only had a severe cardiovascular collapse and did not die.

In 1956, Ayd described the hospitalization of a schizophrenic patient whose agitation was so severe that the dosage of chlorpromazine was gradually increased to 2500 mg. by the 18th hospital day (13). On the 21st day the patient collapsed, went into coma, was found to have a temperature of 108F, and died within nine hours of the collapse. Ayd attributed this death to phenothiazines, not to lethal catatonia. With a few exceptions, the literature since 1956 has seen sudden deaths as "phenothiazine deaths," not "lethal catatonia."

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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Deaths attributed to phenothiazines represent sudden deaths or sudden cardiovascular collapse without physical or autopsy findings that explain the death.[1] Sudden, unexpected, autopsy-negative deaths in the normal population are usually considered to be cardiac deaths. It is difficult to obtain a description of sudden, unexpected, autopsy-negative cardiac deaths in an unselected population, and the major studies on this topic do not separate those which are autopsy-negative from those which are autopsy-positive (14–16). We can say that sudden, unexpected cardiac death tends to occur in the older male, but we can only suggest that this is also true of the subgroup that is autopsy-negative.

We will make the hypothesis that phenothiazine death is not a real entity, but that it is composed of two other entities: lethal catatonia and the autopsy-negative, sudden, unexpected cardiac death found in the normal population. We will more specifically hypothesize that any difference significant at $p<.05$ between the lethal catatonia group and the phenothiazine death group can be explained by the inclusion of the autopsy-negative cardiac deaths.

METHOD

We surveyed the English, German, French, and Italian literature for cases that were called phenothiazine deaths and for cases of lethal catatonia or one of its equivalents. We eliminated those deaths attributed to phenothiazines which could be explained by a pathological finding, such as a bolus of food in the lungs. We also excluded phenothiazine overdoses.

We found 27 studies describing 65 cases of sudden death considered by the authors themselves or subsequent reviewers to be related to phenothiazines. We found 23 studies describing 94 cases considered to be lethal catatonia.[2] We compared two groups according to sex, age, month of death, diagnosis, reports of hyperpyrexia, and length of hospitalization.

RESULTS

Our investigation revealed that there was no significant difference by chi square for sex, but there was a significant difference ($p<.05$) between the two groups for age at death (see table 1).

The literature on lethal catatonia had suggested that deaths attributed to this cause were more common in the warmer months. For 48 of the cases in each of our two groups, the month of death was given. Death occurred in May, June, July, August, or September in 17 of the 48 phenothiazine deaths (35 percent) and in 18 of the 48 cases of lethal catatonia (37 percent). The difference was not significant.

TABLE 1

Comparison of Phenothiazine Deaths and Lethal Catatonia According to Sex and Age

Category	Phenothiazine Deaths (N=65) Number	Percent	Lethal Catatonia (N=94) Number	Percent
Sex				
Male	39	60	46	49
Female	26	40	48	51
Age at death				
Under 21	7	11	15	16
21–30	10	15	28	30
31–40	21	32	33	35
41–50	18	28	10	11
51–60	6	9	7	8
61 or older	3	5	1	1
Mean age at death	38 years		33 years	

Table 2 presents the results of the three remaining comparisons for the two groups. The diagnoses were found to be significantly different at $p<.05$, the highest recorded temperatures were not significantly different, and the lengths of the last hospitalizations were significantly different at $p = .001$.

DISCUSSION

Our findings were that, in comparison to the lethal catatonia group, the phenothiazine death group included more men (although not significantly so), more older patients, and patients hospitalized for a longer period, and had a broader range of diagnoses. The greater numbers of men and of older patients would tend to support our hypothesis that phenothiazine death includes two groups, lethal catatonia and autopsy-negative cardiac deaths. The greater length of hospitalization would also follow from the same hypothesis, since the older patients have had longer hospitalizations.

The broader range of psychiatric diagnoses is not surprising. The literature on lethal catatonia described sudden, unexpected, autopsy-negative deaths as occurring in catatonics or manics, and some of the diagnoses were made after the patient died. In addition, the sudden, unexpected, autopsy-negative deaths of patients who did not have catatonic or manic diagnoses might have been reported under some category unknown to us, if they were reported at all.

In a previous paper (17), we surveyed the reported phenothiazine deaths of patients who had a clinical history similar to that of classical lethal catatonia, i.e., a hyperactive period of less than three months halted by sudden, unexpected, autopsy-negative death. Most of these cases were not adequately described to permit establishing whether the case fitted the classical picture, but 18 very clearly did. When these 18 are removed from our

[1] Isolated reports of myocardial pathology have not been confirmed as the cause of death.

[2] Details on the studies examined, including a full list of references, are available from the authors on request.

TABLE 2
Comparison of Phenothiazine Deaths and Lethal Catatonia According to Diagnosis, Highest Temperature Recorded, and Length of Last Hospitalization

Category	Phenothiazine Deaths (N=65) Number	Percent	Lethal Catatonia (N=94) Number	Percent
Diagnosis				
Organic brain syndrome	7	11	1	1
Mania	0	—	5	5
Schizophrenia	32	50	33	35
Other psychoses	1	2	9	10
Other	10	15	0	—
Unstated	15	23	46	49
Highest temperature				
100–102	1	1	6	6
102–104	4	6	12	13
104–106	2	3	12	13
Higher than 106	1	1	6	6
Unspecified	57	88	58	62
Length of hospitalization				
1–7 days	8	12	16	17
8–21 days	12	18	40	43
22–60 days	4	6	16	17
61–365 days	6	9	15	16
More than a year	32	49	4	4
Unspecified	3	4	3	3

group of 65 phenothiazine deaths, one is left with a group that is even more predominantly male and a group in which the average age at death of the men is higher than that of the women. We realize this is only circumstantial evidence that the same phenomenon which strikes down the older man in the normal population has occurred in the mentally ill who are receiving phenothiazines. However, the higher average age at death for men in this group is highly unusual in the mental hospital population, where elderly women predominate. In addition, women generally have a higher average age at death.

It would appear that sudden, unexpected, autopsy-negative death in a patient receiving phenothiazines should not be attributed to phenothiazines, since there are two previously known groups in which the patient's death might be categorized: cardiac death that is sudden, unexpected, and autopsy-negative, or lethal catatonia. However, there are some unsatisfactory aspects to this conclusion, two of which we should like to mention.

It would have been very desirable to present a comparison of the clinical pictures, but a categorization that goes beyond the "hard" data that we compared in our tables would have created Procrustean beds. Both literatures, especially the literature on phenothiazine deaths, often present cases without any clinical description. When descriptions *are* given, "excitement," "agitation," and "combativeness" are frequently mentioned in the literature on both entities.

A second disappointment came from our inability to obtain an unselected series of sudden deaths in people who were autopsy-negative. Because the literature on sudden, unexpected death does not separate the autopsy-negative from the autopsy-positive, we have had to take the not totally satisfactory position that sudden, unexpected, autopsy-negative cardiac death has the same age and sexual preference as sudden, unexpected, autopsy-positive cardiac death.

CONCLUSIONS

Sudden, unexplained deaths in the mentally ill are a phenomenon that has been described for over a century, yet most of the articles in the past 15 years have attributed these deaths to phenothiazines.

This paper has compared the sudden, unexplained deaths attributed to phenothiazines with those sudden, unexplained deaths attributed to lethal catatonia according to six characteristics. There were some similarities and some differences in these comparisons and nearly all the differences could be explained on some other basis than that there is such an entity as "phenothiazine death." There is some suggestion that "phenothiazine death" includes two previously known types of sudden, unexplained, autopsy-negative deaths: cardiac deaths among the general population and lethal catatonia among the mentally ill. Although our survey raises doubts about the existence of "phenothiazine death," the possibility of its existence could not be completely disproved.

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Psychiatric Assessment of 30 Chronic Users of Cannabis and 30 Matched Controls

BY MICHAEL H. BEAUBRUN, M.B., AND FRANK KNIGHT, M.B.

A study done in Jamaica of 30 chronic cannabis smokers (use for at least seven years) and 30 matched controls revealed no significant differences between the two groups in the incidence of mental illness or of abnormalities of mood, thought, or behavior. Nor did the groups differ significantly with regard to criminal records, use of other drugs, or upward or downward movement in social or economic position.

RECENT AMERICAN AND CANADIAN reports on cannabis (1–3) have stressed the need for more information about its long-term effects on chronic users. Jamaica offers a particularly good opportunity to investigate such effects, since: 1) the use of cannabis has been endemic for more than 100 years; 2) its use is widespread in the lower socioeconomic classes; and 3) there is remarkably little use of other drugs with the exception of alcohol and tobacco (4, 5).

In 1970 and 1971 a team of anthropological field workers studied approximately 2,000 people from seven areas of Jamaica. From four of these locations they identified a representative sample of 30 chronic users of cannabis and 30 matched controls who agreed to remain in the hospital for six days and nights to undergo physical, psychological, and psychiatric assessment. The subjects were matched individually for social class, occupation, income, age, and sex. Chronic use was defined as daily use over a period of not less than seven years. All of the subjects admitted to having smoked a minimum of three "spliffs" a day or its equivalent. A "spliff" refers to a mixture of tobacco and marijuana approximating the U.S. "joint" but of greater potency. A sample of the marijuana normally smoked was collected from each subject; the mean weight for each sample showed a delta-9-tetrahydrocannabinol content ranging from 0.7 percent to 10.3 percent, with a mean weight for the entire sample of 2.96 percent.

In this paper we will deal only with the results of the psychiatric examinations, which were conducted by two psychiatrists to whom the subjects were randomly assigned.

The objectives of the psychiatric assessment were as follows: 1) to look for evidence of psychosis or detectable abnormalities of mood, thought, behavior, or perception and to find any correlations of these with cannabis use; 2) to supplement the information on the subjects' life histories that had been obtained by the sociological field workers and to serve as a further check on this information; 3) to investigate the personality correlates of smokers and nonsmokers in terms of extraversion and neuroticism; 4) to examine the relationship of chronic smoking to arrests and conviction for crime, use of other drugs, and upward or downward social mobility as revealed by the life histories; and 5) to examine the relationship between parental deprivation in early life and the use or nonuse of cannabis.

METHOD

The following five forms were used: 1) a life history in narrative form, 2) a general-purpose psychiatric questionnaire precoded for computer use (originally piloted at Rockland State Hospital, Orangeburg, N.Y. (6), 3) a precoded mental status examination record (developed by Drs. Spitzer and Endicott of the New York State Psychiatric Institute) (6), 4) the short form of the Eysenck Personality Inventory, which was piloted and adapted for local use in a previous study (7), and 5) a smoking history

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This report is part of a larger study, "Effects of Chronic Smoking of Cannabis in Jamaica," supported by Public Health Service contract HSM-42-70-97 from the National Institute of Mental Health.

The authors wish to thank Dr. Nathan Kline for his assistance with the computerization of the data, Dr. Timothy Harding for his work on the statistics and on the data regarding parental deprivation, and Ms. Stella Beaubrun for her help in keeping the records and in coordinating the project.

TABLE 1
Comparison of Smokers and Nonsmokers

Item	Smokers (N=30)	Nonsmokers (N=30)
History of mental illness in family (excluding alcoholism)*	8	2
History of mental illness in subject (excluding alcoholism)	1	1
History of alcoholism in family	7	3
History of alcoholism in subject	4	3
Hallucinatory experiences**	10	2
Arrested at least once	10	7
Arrested two times or more	5	2

*p<.05.
**p<.01.

schedule that incorporated questions about attitudes toward cannabis use and opinions about its medicinal and other uses.

Subjects were admitted to the hospital from Monday to Saturday and were requested not to smoke cannabis while in the hospital.

RESULTS

The main findings are summarized in table 1. Eight of the 30 smokers had a positive family history of mental illness, while only two of the 30 nonsmokers had such a positive family history. This difference is significant ($\chi^2 = 4.25$, df = 1, $p < .05$).

One smoker and one nonsmoker gave personal histories of past mental illness. Both also had family histories of mental illness. The smoker had been hospitalized for a schizophreniform illness that might have been provoked by heavy cannabis use. A positive family history of mental illness normally indicates a greater likelihood of illness in the subject. Therefore the absence of any greater incidence of illness in the smokers suggests that cannabis smoking may play a role in preventing psychosis in predisposed individuals.

Seven smokers and three nonsmokers gave family histories of alcoholism, a difference that did not reach significance at the level $p < .05$. The criteria used for arriving at a diagnosis of alcoholism in the family necessarily had to be somewhat rough and ready: Any report by the subject of a family member who drank heavily and whose work and social functioning seemed to have been disrupted by alcohol resulted in our recording a family history of alcoholism.

Four smokers and three nonsmokers were adjudged as having had problems with alcoholism in the past.

In a field survey of drinking practices in Jamaica in 1966, one of us (M.H.B.) found relatively few alcohol problems among Jamaicans of African origin and from a low socioeconomic class and suggested that ganja (cannabis) might be used as an alcohol substitute by lower-class Jamaicans (7). Prince, Greenfield, and Marriott (8) in a later study supported this view and found evidence that ganja might be a benevolent alternative, protecting poor Jamaicans from becoming alcoholics.

The figures emerging from this latter study are not sufficient to reach a verdict on this issue, but it is worth recording that two of the smokers in our study reported that they had been able to reduce their alcohol intake and seemed to relate this to cannabis use. One of them (aged 54) was the only man in the study who had started to smoke cannabis relatively late (at age 44), and he had been able to stop drinking entirely in the past four years.

Ten smokers reported having had hallucinatory experiences as compared with two nonsmokers, a difference significant at the $p < .01$ level. Of the smokers, more than half had had these experiences once only when they first began using the drug in adolescence or earlier or when they used it in pure form.

Three subjects from one area of Jamaica reported a first-time visual and auditory hallucination of a little lady dancing toward them in a fear-provoking experience that sounded like an initiation rite. The experience seemed to be exciting as well as frightening, but the subjects knew that they had only to hold their ground and open their eyes wide for the vision to disappear. They seemed to feel that they were being tested, and one subject said that his mother had told him that if his mind were not strong, he would go mad.

Ten smokers had been arrested at least once as compared with seven nonsmokers (difference not significant). In view of the fact that possession of cannabis carries a mandatory prison sentence of 18 months, this finding is a little surprising. Three of the smokers had been detained for possession of cannabis. On the whole the figures suggest no significant relationship between cannabis and crime.

The relationship of smoking to repeated arrests (two or more) was also investigated, but again the figures showed no significant difference.

OTHER MEANS OF COMPARISON

Extraversion scores on the Eysenck Personality Inventory (short form) for smokers and nonsmokers were identical (mean score of 3.75). On the neuroticism scale smokers had a mean score of 1.8 (out of a possible 6), with a standard deviation of 1.37, while nonsmokers had a mean score of 2.2, with a standard deviation of 1.88. This difference was not significant.

It was noted that the smokers were more affable and popular than the nonsmokers, though nurses and others on the ward were not told whether the subjects were smokers or nonsmokers and all of the examinations other than the psychiatric examination were conducted blind. Nonsmokers were more often identified as "neurotic" and were more often impatient or intolerant of ward routines and discipline. This effect may have been due to a difference in motivation. While all of the subjects were paid equally for their time and all seemed to value the opportunity for a physical checkup, the smokers also

seemed motivated to prove that their practice was not harmful.

No significant abnormalities emerged from the mental status examinations. Three ratings were obtained from the computer: 1) a Hamilton Rating Scale for Depression, 2) a schizophrenic rating scale, and 3) the Wing Rating Scale. Of the results obtained from these, the only abnormality shown was a mild depression in one nonsmoker.

The use of hard drugs is as yet virtually unknown among working-class Jamaicans, and it was not surprising to find that no one in the study had ever taken any narcotics, stimulants, hallucinogens, or sedatives. The only drugs used other than cannabis were alcohol and tobacco. In every instance use of cannabis was preceded by cigarette smoking.

In view of the frequent reports that the use of cannabis leads to a loss of competitive striving and an "amotivational syndrome," particular attention was paid to the subjects' work records as revealed in their life histories and the general-purpose psychiatric questionnaire. Data were carefully recorded concerning the regularity and continuity of employment and the frequency and nature of job changes. No significant differences in work record could be demonstrated between smokers and nonsmokers. It may be that a difference could have been demonstrated if our sample had included intellectual workers or white-collar workers of any kind, but in a sample made up mainly of fishermen, subsistence farmers, and unskilled or partly skilled manual workers from villages where there is relatively little mobility, such differences were not detectable.

For a more complete answer to the question of the amotivational syndrome it would seem desirable to examine samples of students or other more competitive groups.

An attempt was made to assess the quality of the subjects' early lives and to see whether parental deprivation in early childhood might be related to smoking or nonsmoking in later life. A scale of items indicating deprivation was drawn up, and interobserver reliability of the method of assessment was established. Deprivation scores in smokers and nonsmokers were found not to differ significantly (two separate statistical methods were used).

CONCLUSIONS

No significant difference could be demonstrated between the two samples in the incidence of mental illness or alcoholism or of any abnormalities of mood, thought process, or behavior; the smokers, however, had had more mental illness in their family histories and had experienced hallucinations more frequently than the controls. Such hallucinations had usually occurred once only—on first smoking cannabis.

Nor were significant differences found between the chronic smokers and the nonsmoker controls on scales for extraversion and neuroticism measured by an adapted version of the shortened Eysenck Personality Inventory. Finally, no significant differences could be demonstrated between the two groups in the number of arrests or convictions for crime, the use of other drugs, or upward or downward movement in social or economic position.

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Problem Formulation: The Problem-Oriented Record

BY RALPH S. RYBACK, M.D., AND JOHANNA S. GARDNER, M.D.

The authors discuss the benefits of using a problem-oriented record (chiefly the clearer documentation of treatment, the simplification of communication among mental health personnel, and the stimulation of further research) and the problems inherent in applying this approach to psychiatric practice. Both the benefits and the problems are illustrated by means of two case reports.

THE PROBLEM-ORIENTED RECORD was developed by Lawrence Weed (1, 2) and adapted by others (3) as a logical means of transmitting and assessing medical data for the purposes of treatment and evaluation. It can be an integral part of the scientific portion of the mental health information system (4, 5). It is composed of four portions: 1) data base, 2) problem list, 3) plans, and 4) follow-up (see appendix 1). It is problem oriented in that it contains a complete list of the patient's problems and progress notes specifically related to each of those individual problems. The pertinence of this method to psychiatry has recently been reported by Grant and Maletzky (6) and Hayes-Roth, Longabaugh, and Ryback (7).

The purpose of this paper is to discuss the formulation of psychiatric problems, and the inherent difficulties of applying the problem-oriented record to psychiatry, using as an example a case in which problem formulation was performed in one way at the time of admission and then reviewed and reformulated by a consultant at a later time. Another case is briefly presented to demonstrate how a flow sheet can be used to summarize a complicated psychiatric history involving the use of several psychotherapeutic medications.

CASE REPORTS

Case 1. P.H., a 47-year-old woman, is the mother of two children. At her first psychiatric admission, which lasted three days, her *chief complaint* was an overdose of secobarbitol and amobarbitol (Tuinal); she said, "I didn't mean to harm myself."

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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The authors wish to thank Dr. Ross Grumet for his assistance with this paper.

Her *present illness* began in 1964, when she experienced two losses: her husband began a new job that involved his spending more time away from home and a valued maid left the household for personal reasons. P.H. felt angry, unhappy, "abandoned and cut off when I needed [them] most," and suspected her husband of infidelity. Her chronic symptoms of premenstrual headaches and dysmenorrhea became more distressing and incapacitating; she complained of fatigue, insomnia, weight loss, and dysuria. She also complained of heavy, painless menstrual bleeding: "finding myself floating in blood; it's an axe over my head." Repeated gynecologic, endocrinologic, and neurologic evaluations (including diagnostic dilation and curettage in 1966) were negative.

In 1969 P.H. was found to have moderately elevated monoamine oxidase levels, and the administration of oral estrogens (10 mg. of Provera and 10 mg. of Premarin) was begun. Initially she experienced fewer headaches and less depression; then the symptoms recurred. In 1970 she requested a total hysterectomy for "cure." Her two sons went away to school. She was referred to Dr. X. for psychotherapy. She began to abuse drugs (glutethimide [Doriden], Tuinal, and phenobarbital) by taking excess medication illegally procured by her husband. She was hospitalized three times for withdrawal symptoms. About a month prior to her psychiatric admission Dr. X. refused to prescribe further medication. The week before admission she took 20 Tuinal tablets over three days, became frightened of her suicidal thoughts, and sought psychiatric hospitalization.

According to her *history*, P.H. is the eldest of three children of an upper-middle-class suburban family from the Northeast. Her father is an architect, described as domineering and perfect; she described her mother as "living in a dream world, a 'yes' world in which everything was my father." She had the normal developmental landmarks and a "usual" fear of the dark. She felt her parents spoiled her and implied she couldn't function without them. She had a good academic record in college. She wanted to make dancing her career, but her parents disapproved. She married an architect who "would take care of me as my father had." Shortly after her marriage she was involved in an automobile accident; her husband was driving but was not at fault. She attributed her headaches to injury in this accident.

Physical examination revealed a scar on the right supraorbital ridge. There was no evidence of organic disease. The *mental status exam* revealed a seductive appearance, no evidence of thought disorder, depressed affect, and limited insight into her illness. Her full scale IQ in psychological testing was 116, with no verbal-performance discrepancy. She was seen as narcissistic, with poor frustration tolerance, transitional object relationships, and a hostile-dependent attitude ("biting sarcasm") toward men, whom she either idealized or devalued.

The admitting physician formulated the following problem list, which he divided into psychiatric, social, and organic problems:

Psychiatric: 1) infantile narcissism, 2) seductiveness, 3)

TABLE 1
Problem List Developed by Consultant for Patient P.H. (Case 1)

Problem Number	Problem—Active	Date of Onset	Problem—Resolved	Date Resolved
1	Psychophysiologic disorder			
	Headaches	1953		
	Retention of right supraorbital scar	1953		
	Dysmenorrhea	1943		
	Dysuria	1943		
2	Menorrhagia	1963	Two dilation and curettages	1966
			Two miscarriages	1964
			Two pregnancies with bleeding	
			Administration of Premarin and Provera	1970
3			Auto accident with head injury	1953
			Incomplete surgery to repair right supraorbital scar	1953
4	Depression, acute and chronic, with suicidal ideation and insomnia			
5	Borderline personality organization, hostile-dependent and narcissistic			
6	Nontoxic colloid goiter	1969		
7	Maternal history of menopausal menorrhagia with hysterectomy and postoperative depression			
8	Adverse drug reactions			
	Methysergide (Sansert): weight gain	1970		
9	History of drug abuse with seizures			
	Glutethimide (Doriden)	1970		
	Phenobarbital withdrawal seizure	1971		
	Tuinal	1971		
10			Dislocation of left shoulder	1969
11	Compression fracture: thoracic vertebrae 8, 9, 10 (possibly related to problems 3 and/or 9?)			

manipulativeness, 4) mild depression (possibly involutional), 5) mild anxiety, 6) mild insomnia.

Social: 1) hostile-dependent relationship with husband and parents, 2) disposition.

Organic: 1) menorrhagia, 2) rule out migraine, 3) various somatic complaints, 4) status after car accident with head and back trauma, resolved.

He used these divisions to help organize his thinking about the patient. He assessed each problem individually and developed a treatment plan. A sample progress note follows:

Progress Note—7/16/71

Social Problem 1: Hostile-dependent object relationships

Subjective: The patient states, "I love my husband and yet I am furious with him. He never wanted me to do anything. He treats me like chattel. His days have been far more stimulating than mine and I'm jealous. I'm angry, but I've never expressed it. I berate *myself.* I *need* to have my parents and my husband favor me to feel good."

Objective: The patient wanted to be a dancer but, "not having enough guts to pack up and leave" her father, who disapproved of her career choice, she continues to blame him for her unfulfilled life. The patient took an overdose of medication when Dr. X. refused to prescribe any more drugs. She has engaged a number of physicians in her gynecologic complaints, trying to obfuscate interhospital communication; she has escalated her demands for "cure" through more potent psychotropic medications and more radical surgery (hysterectomy).

Assessment: The patient feels entitled to the best of everything, yet is incapable of obtaining even a feeling of well-being on her own; she is therefore extremely dependent on significant objects. Possibly because of her mother's relative withdrawal, she sees men as the suppliers of good feeling. She has fused her libidinal and aggressive drives. As a result partly of her father's domineering personality and partly of her projected hostility, she sees men in sadistic roles and accepts a masochistic position. Her object relations are transitional at best. She expresses her conflicts (rage versus need) somatically in headaches and dysmenorrhea.

Plan: Begin insight-oriented psychotherapy three times a week as an outpatient. Expect hostile, dependent transference. Coordinate patient's medical program to ensure optimal communication of her masochistic and dependent style with physicians. The patient should not have gynecologic surgery unless absolutely necessary.

Several months later a consultant reviewed the case. His general approach differed somewhat in that he did not use "psychiatric, social, and organic" as categories, but rather simply listed all the problems this patient

TABLE 2
Flow Sheet of Medications for Patient C.M. (Case 2)

Date	Seizures	Anticonvulsant Medication*
1949–1959	Onset of minor motor seizures: surgical clipping of arteriovascular malformation	Unknown dosages of Dilantin and phenobarbital
1960		Dilantin discontinued; phenobarbital 100 mg.; Mysoline 750 mg.
1963	Seizure disorder controlled	Phenobarbital and Mysoline discontinued; Mesantoin dosage unknown
1966		Mesantoin 500 mg.
1970		Mesantoin 500 mg.
4/9/71		Mesantoin 500 mg.
5/12/71 (Hospital X)		Mesantoin 500 mg.
5/14/71 (Hospital X)	Possibly one tonic spell	Mesantoin 500 mg.
5/17/71		Mesantoin 500 mg.
5/18/71 (Admission to McLean Hospital)		Mesantoin 500 mg.
5/22/71	Right-sided tonic seizure with subsequent drowsiness	Mesantoin 500 mg.
5/23/71	Right-sided seizure with subsequent sleep	Mesantoin discontinued; Dilantin 500 mg.; phenobarbital 150 mg.
5/25/71		Dilantin 500 mg.; phenobarbital 150 mg.

*Dilantin = diphenylhydantoin, Mysoline = primidone, Mesantoin = mephenytoin.
**Librium = chlordiazepoxide, Elavil = amitriptyline, Tofranil = imipramine, Thorazine = chlorpromazine.

faced. The problem list that resulted was somewhat different and included several problems not listed by the admitting physician (see table 1).

Case 2. C.M., a 39-year-old married woman, was admitted with an acute psychotic episode. Her multiple problems included seizure disorders, arteriovascular malformation of the left parietal lobe, acute psychosis, and chronic depression in a narcissistic personality. In this case, in which the medical and psychiatric problems were interrelated, a flow sheet documenting certain objective parameters was extremely useful (see table 2; the material has been adapted somewhat for purposes of publication).[1]

DISCUSSION

The consultant in case 1 did not feel that it was necessary to have a format of psychiatric, behavioral, and social categories to guide his thinking. He felt that these divisions, as well as relevant demographic considerations, should be included in any problem list. The consultant's list also differed from the admitting physician's in that he noted additional problems, such as "drug abuse." The admitting physician was actually aware of this problem and responded to it, since he discontinued all medications during the initial period of evaluation. However, he did not document his awareness in the problem list or in the progress notes. Thus the utilization review committee or any other interested health care providers would not have ready access to the admitting physician's full analysis.

The consultant also tended to group the admitting doctor's problem categories under more sophisticated headings (i.e., psychophysiologic disorder, borderline personality organization). Accordingly, several problems could be defined so that they fit into a more meaningful rubric at a higher level of understanding. For example, after the consultant's visit, the admitting resident was able to group his associated psychiatric problems of infantile narcissism, seductiveness, manipulativeness, and mild anxiety (#1, 2, 3, 5) and the social problem of hostile-dependent relationships (#1) under the heading "borderline personality organization in a hysterical personality." This heading would then represent a new problem (e.g., psychiatric problem 7) in his problem list, which he would date as to the time defined. He would discontinue the other problems with the note "see psychiatric problem 7."

On the other hand, if one is unsure of the diagnosis, then the sign, symptoms, or laboratory value should be stated as the problem. For example, instead of "rule out migraine," the second organic problem should be "headache," with a note that suggests migraine and includes a detailed plan for working up the problem. In the same

[1] Copies of the original chart are available from the authors on request.

Psychoactive Medication**	Other Medication	Remarks
		Dilantin and phenobarbital are ineffective
Librium 50 mg.		Anxiety
Librium 50 mg.; Elavil dosage unknown		
Librium 50 mg.; Elavil discontinued; Tofranil 100 mg.		Elavil no longer effective; increasing depression
Librium 50 mg.; Tofranil 100 mg.	Penicillin, steroids for pyorrhea	Abrupt onset of acute psychosis with visit to dentist
Unknown, possibly Librium and Tofranil	Warfarin, heparin for phlebitis	Hallucinations, bizarre behavior
Thorazine 100 mg. immediately, then changing dosages		Low amplitude fast activity on EEG; lumbar puncture normal; brain scan abnormal
Thorazine 400 mg.		
Thorazine 400 mg.		Neurological consultation confirmed: 1) schizophrenia, 2) temporal lobe epilepsy
Thorazine 600 mg.		
Thorazine 600 mg.		
Thorazine 1000 mg.		

manner, "rule out hallucinations" is not the problem when "looking around or intermittent staring" is what has been observed and is certain. As the evaluation of the problem proceeds, documented in the progress notes, this problem might become "visual hallucinations" and then "chronic schizophrenia, paranoid type."

Problems may thus be signs, symptoms, laboratory values, diagnoses, psychodynamic formulations, or social or economic difficulties. A problem may also be "incomplete data base" if the information defined as necessary is missing, thus making evaluation and/or treatment a "problem" for both therapist and patient. The same case history will be interpreted differently by mental health personnel with different orientations and differing levels of experience, e.g., psychoanalysts, medical students, behaviorists, social scientists, and psychologists. A behaviorally oriented consultant, for example, might develop a problem list for patient P.H. like that shown in table 3.

The value of the problem-oriented approach is that the physician must clearly specify (in the problem title and progress note) what his orientation is, how he assesses the data, what he tells the patient, and then what the results of his plans are. In this manner, treatment is documented, communication among mental health personnel is simplified, and research is stimulated.

The flow sheet for case 2 is presented to introduce this useful technique to psychiatry, where psychopharmacology is rapidly becoming more prominent. Since such a great number of drugs is now being prescribed, their side effects and interactions have become crucial in treatment. The flow sheet allows the physician to quickly note and evaluate the usefulness of all the patient's previous, as well as present, medications.

Several difficulties in applying the problem-oriented approach to the psychiatric record are apparent. The psychodynamic formulation may be sufficiently complicated that crystallization into a diagnosis or phrase is difficult or meaningless. In that case, one must then write "Problem 1, see formulation"; but it is quite possible that as time passes one will be able to state the essence of the problem more succinctly. That the state of the art is imprecise does not argue against use of the method.

Secondly, the philosophy of viewing the patient as a list of *problems* is to some discouraging, and seems to ignore the patient's strengths and adaptive solutions. However, the patient comes to the doctor because he *is* symptomatic and seeks consultation and treatment for his complaints. How the physician integrates therapeutic modalities to amplify the patient's own strengths is an important component of the "assessment" and "plan" portions of the progress notes.

Similarly, it is said that to "fragment" an individual into various problems is to ignore his basic individuality and wholeness. However, the more complete the problem list, the closer it approximates the patient's individuality;

TABLE 3
Behaviorally Oriented Problem List for Patient P.H. (Case 1)

Active Problems	Inactive Problems
1. Suicidal behavior	
2. Drug dependence: Barbiturates and glutethimide	
3. Headaches	
4. Depressed behaviors: Feels unhappy; Multiple somatic complaints; Critical of husband; Fears of abandonment	
5. Incomplete data base	
	6. Menorrhagia: Estrogen abnormality
7. Marital dysfunction	

and each problem is assessed and treated *in the context* of the other problems. Just as in medicine one does not treat congestive heart failure in the presence of renal impairment as one treats it in a patient with adequate kidney function, so one cannot treat depression out of context, as in case 1, by not taking into account this patient's menorrhagia and her maternal history of severe depression following hysterectomy.

Finally, it might be argued that at least in analytically oriented psychiatry, as in no other field of medicine, the *patient* is the record. Whereas in medicine a patient need not have any expertise in cardiology for his congestive heart failure to respond to digoxin, in psychiatry "working through" a problem to a change in behavior or feeling means that the patient has gained insight and shared his doctor's expertise in examining his psychological makeup. Indeed, the therapeutic sessions are a series of "progress notes." There can be no quarrel with the patient's being the ultimate record of psychotherapy, but the advantages of an accurate, *written* record are substantial: quick information retrieval, documentation of effective treatment programs, research, teaching, and various administrative uses.

The problem-oriented record faces many difficulties in psychiatry in that it puts pressure on the complicated dynamic record. The "pneumococcus," so to speak, has not been isolated in schizophrenia. Nevertheless, in the most general sense, what this approach offers is a scientific attempt to find out what we are doing.

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APPENDIX 1

An Outline of the Four Basic Sections of the Problem-Oriented Medical Record

DATA BASE

Chief Complaint
Present illness
Psychosocial history
Family history
Physical examination, past medical history, review of systems
Mental status examination
Psychological testing
Laboratory studies

PROBLEM LIST

Problems (to be stated at the physician's level of understanding):
- Etiologic, diagnostic, dynamic (e.g., schizophrenia)
- Abnormal laboratory findings (abnormal EEG)
- Physiologic (intention tremor)
- Social, demographic (separated from spouse)
- Behavioral (temper tantrums)
- Mental status (thought disorder, hallucinations)
- Symptoms (insomnia)

The problems are numbered and the number is constant throughout the record; the list of problems becomes an index to the patient's record.

PLANS

Specific statements of:
1. The protocol for "working up" each problem, the differential diagnosis, exactly what additional information is needed, how it is to be obtained, and in what order
2. The treatment (e.g., psychotherapy, behavior therapy, ECT, psychopharmacology); what parameters are necessary to judge efficacy
3. What the patient is to be told

FOLLOW-UP

Progress notes (numbered and titled; organized into subjective or symptomatic data, objective data, assessment, and plans)
Flow sheets (where applicable)

Follow-Up on Baxstrom Patients Returned to Hospitals for the Criminally Insane

BY HENRY J. STEADMAN, PH.D.

Of 967 patients transferred from hospitals for the criminally insane to civil mental hospitals as a result of the Supreme Court decision in the Baxstrom case, 26 were returned to hospitals for the criminally insane between 1966 and 1970. There was no factor or set of factors that significantly differentiated this group from other Baxstrom patients, although the 26 tended to be younger and to have more serious criminal records. Some differences were also found between patients returned via civil proceedings and those returned via criminal proceedings.

IN OUR PREVIOUS discussions of the 967 Baxstrom[1] patients (2–4), we noted that only 26 (2.7 percent) of them were returned to Matteawan or Dannemora, New York State's two hospitals for the criminally insane, at any time after their original transfers in 1966. Until recently there were no data available on these returnees with which to answer the questions that have been raised about this group, including how it may have differed from the rest of the Baxstrom patients. Our intent here is threefold: to briefly describe the returnees, showing that they differed very little from the rest of the Baxstrom patients; to report some differences among the returnees; and to discuss the types of behaviors that led to their returns.

The first point that must be emphasized when talking about the Baxstrom returnees is that they comprise a very small part of the Baxstrom population. It is very easy when looking at the serious problems these patients present to generalize the problems to all the Baxstrom patients. This should not be done. As already noted, the returnees comprise only 2.7 percent of the entire population. Also noteworthy is that one-third of the Baxstrom patients were in the community four and a half years after their transfers; their cumulated release rate was higher than that of all adult, chronic, civilly committed patients. With this note of caution, let us look at the characteristics of the returnees.

The most striking feature of the Baxstrom returnees is that their backgrounds differ little from the other Baxstrom patients. About the same proportion of returnees as other Baxstrom patients came from Matteawan and Dannemora (50 percent of the returnees came from Matteawan whereas 59 percent of all the Baxstrom patients were from Matteawan). The racial proportions were also about the same in the two groups: a ratio of 58 blacks to 42 nonblacks for the returnees compared to a 50:50 ratio for the other Baxstrom patients. Minimal differences were also found in the number of previous arrests, the number of previous incarcerations, the number and type of violent crime convictions, and the number and type of sex crime convictions.

We were able to find only two factors differentiating the Baxstrom returnees from the other Baxstrom patients. The returnees were much younger than the other Baxstroms: the average age of returnees at the time of transfer was 33, while the average of the other Baxstrom patients was 47 at the time of transfer. The second differentiating factor was the returnees' Legal Dangerousness Scale scores. (This scale and its use as a summary measure for the criminal history of the Baxstrom patients before institutionalization are described in detail elsewhere [5].) The score can range from 0 to 15. The higher the score, the more serious the criminal history. The average score for the male returnee was 9.2 and for the other Baxstrom males was 6.0 ($t = 3.287$, $p = .01$).[2] This difference does not mean, however, that the return could have been predicted from the scores. Over 90 percent of the Baxstrom patients with a score of 9 or more did *not* return to Matteawan or Dannemora. It does mean that the younger patients with more serious criminal histories were the group most likely to return, but the vast majority even of this highest risk group did not return.

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The author would like to acknowledge the helpful comments on earlier drafts of this manuscript by Elizabeth Markson, Terry O'Bryan, and Gregory Bell.

This work was supported by Public Health Service grant MH-17431 from the National Institute of Mental Health.

[1] The Supreme Court held (1) that Johnnie K. Baxstrom had been denied equal protection of the laws by the statutory procedure under which he was held at Dannemora State Hospital for prisoners declared mentally ill while serving a criminal sentence. When his maximum sentence expired in 1961, Baxstrom was civilly committed to Dannemora under the provisions of Section 384 of the Correction Law, which gave procedures for retaining persons found to be still mentally ill on expiration of their sentences. The Supreme Court in effect held Section 384 to be in violation of the equal protection clause of the Fourteenth Amendment. The nearly 1,000 patients affected by the decision were transferred from New York State's two hospitals for the criminally insane to civil mental hospitals.

[2] The number of female returnees, two, was too small to allow a comparable testing of their scores.

TABLE 1
Behavior Leading to Return of Baxstrom Patients Under Section 85 (N=15)

Behavior	Number	Percent
Threats only	4	26.6
Assaults against property	1	6.7
Assaults against persons		
With no injury or minor injury	4	26.6
With major injury	1	6.7
Resulting in death	1	6.7
Other (e.g., wife's request, criminal history)	4	26.6

REASONS FOR RETURN

The 26 Baxstrom returnees separate into two very distinct groups based on the path of their return.

The first group of 15 were returned to Matteawan under Section 85 of the New York State Mental Hygiene Law as "dangerously mentally ill." This is a civil procedure. These patients were returned because of behavior in the hospital defined as dangerous to the staff, to other patients, or to the community if the patients were to escape. These 15 patients had a wide range of behaviors causing their return (see table 1). For the six returnees with assaults against persons, there was a single serious incident that precipitated the return. For the four with threatening behavior only and for the one patient with assaults against property, there was a series of incidents culminating in the return to Matteawan.

The remaining four patients who returned under Section 85 (classified as "Other" in table 1) did nothing after their transfers to civil hospitals that specifically led to their return. One was described in a letter requesting Section 85 proceedings as "the most violent and dangerous patient in Dannemora State Hospital" before his transfer. However, during his five weeks in the civil hospital before being returned under Section 85, there was no report of any incident while he was kept in maximum security with a special security attendant assigned to him 24 hours a day. The records of the other three patients offered only vague reasons for their return. One patient, who was transferred under a "forthwith" Section 85 order after one day in a civil hospital, had his order rescinded three weeks later when his hearing took place. Another patient was sent to Matteawan apparently because his wife read in the newspaper about "Operation Baxstrom" and wrote the hospital director that she was afraid her husband would escape and harm her, although the patient had given no indication of dangerous behavior after his transfer. The last patient in the "Other" category was returned, according to hospital records, because of his criminal history *before* his Baxstrom detainment; there were no reported behavioral problems after his initial transfer.

The second group, consisting of 11 returnees, had been released into the community at some time after their original transfer to a civil hospital but were rearrested. Six of the 11 were found incompetent to stand trial after their arrest and were returned to Matteawan. The other five were convicted, incarcerated, and then transferred to Dannemora as psychiatrically disordered criminals. The charges and institutionalizations leading to the return of these 11 patients are shown in table 2.

With the exception of one unspecified parole violation, all the charges for which these patients were returned were felonies. In addition, the men had an average of one other previous arrest between their release and the current charge. The average length of stay in the community for both this group and the four Section 85 patients who were in the community for some time was 12 months. In no instance did any of the 11 in the criminal group return to the community after returning to Matteawan or Dannemora. The parole violator completed his time and was transferred to a civil hospital, where he remained at the end of our follow-up.

Just as younger age and more serious criminal histories differentiated the Baxstrom returnees from the other Baxstrom patients, these factors differentiated the Section 85 returnees from the criminal procedure returnees. At the time of transfer, the average age of the entire Baxstrom population was 47. The average age of the Section 85 returnees was 35, and of the criminal returnees, 30. The average Legal Dangerousness Scale score for all the Baxstrom patients was 6.0; for the Section 85 returnees it was 8.1; for the criminal returnees it was 10.4. A third factor distinguishing the Section 85 from the criminal procedure group was the number of previous arrests. The average number for the Section 85 group was 3.5 (lower then that for all the Baxstrom males, which was 4.3); the criminal procedure returnees averaged 5.1 previous arrests.

DISCUSSION

The Baxstrom patients who were returned to Matteawan and Dannemora after their original transfers were for the most part acting out in very violent ways. However, this group of 26 represented only 2.7 percent of the 967 patients transferred. The vast majority of the Baxstrom patients were suitable for care in civil hospitals and one-third of all the transfers were in the community four and a half years after their transfers. While the patients discussed here had serious criminal charges and convictions after their return to the community, only 17 percent of all Baxstrom patients released into the community were rearrested, most often for violations or misdemeanors. Unfortunately, we were able to find no factor or set of factors that could have selected these returnees from all the Baxstrom patients without a very large number of false positives—i.e., patients with the same characteristics who did not act out violently.

Section 85 of the New York State Mental Hygiene Law, under which 15 of the 26 returnees were returned, is primarily retrospective in character. It defines someone as "dangerously mentally ill" if he committed an act

TABLE 2
Incident Precipitating Return of Baxstrom Patients Through Criminal Procedures (N=11)

Charge	Procedures and Institutionalizations Leading to Return*
Second-degree assault and possession of a dangerous weapon	Ten-year sentence, prison, Dannemora
Third-degree burglary and unlawful use of a motor vehicle	Five-year sentence, prison, Dannemora
Second-degree manslaughter	Three- to six-year sentence, prison, Dannemora, prison
Second-degree larceny	Five-year sentence, prison, Dannemora
Parole violation	Prison, Dannemora, civil mental hospital
Second-degree robbery	Incompetent, Matteawan
Burglary	Incompetent, Matteawan
Attempted second-degree robbery	Incompetent, Matteawan
Second-degree robbery	Incompetent, Matteawan
Attempted first-degree robbery	Incompetent, Matteawan, court, four-year sentence for first-degree robbery
Homicide, grand larceny, and burglary	Incompetent, Matteawan (malingerer), court, ten- to 20-year sentence for first-degree manslaughter

*The last notation in each history indicates the patient's location at the end of the follow-up period.

that, if it occurred in the community, would have been classed as a felony. Although the interpretations of this section in the cases of some of the Baxstrom returnees may have stretched this definition, it does provide a fairly firm basis for court action.

In the criminal proceedings under which the other 11 Baxstrom returnees were returned, the judicial determinations that returned them involved mainly an assessment of current mental states. Once indicted and found incompetent to stand trial they were sent to Matteawan, or if they were first convicted and then displayed disordered behavior they were sent to Dannemora through an administrative action. The New York State Criminal Procedure Law that became effective on September 1, 1971, is less straightforward, dividing the incapacitated defendants into "dangerous" and "nondangerous" groups. In the case of the indicted incapacitated felony defendant, two psychiatrists must make a recommendation to the court regarding dangerousness that includes a prediction of probable future behavior. While the ultimate decision is the court's, during the first four months there was 90 percent agreement between the courts and psychiatric reports. Thus, the type of problem we have discussed here about selecting out the Baxstrom returnees from the Baxstrom patients who made much better adjustments has become even more important.

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The Writ Writer

BY MICHAEL F. CLEARY, M.D.

The author discusses patient-prisoners on forensic psychiatry units who seek to improve their situation by contacting the courts by means of writs. This practice is becoming increasingly evident as more attention is focused on the rights of prisoners and prisoner-patients. Patients who are skillful in this area may not only improve their legal situations, but may also acquire added prestige among fellow patients.

THE PATIENT ON A FORENSIC PSYCHIATRY unit has two immediate problems—his mental illness and his current conflict with legal authority. A third problem, compounding and initially related to the first two, is his lack of financial resources. As a consequence, the vast majority of patients in such units cannot afford a private at-

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torney; a public defender may be assigned to a patient's case or a court-appointed attorney will act as defense counsel. The public defender may have a large case load and only a limited amount of time to devote to each client; he may be inexperienced, and he may not inspire the confidence that a private or "street" lawyer does.

The court-appointed lawyer may have excellent qualifications and may be capable of doing a thorough defense job, but the patient may not trust him since he is court-appointed and therefore represents the system with which the patient finds himself in conflict. A further limitation of the attorney's role in the eyes of the patient is that his activity may be related only to the offense with which the patient is charged, whereas the patient may wish to air a number of different issues in court.

WHY PATIENTS WRITE WRITS

The patient often comes to the forensic unit with a background of repeated conflicts, misunderstandings, and losing encounters in both criminal and civil proceedings. He may have experienced many aspects of the law—child custody hearings, divorce court, bankruptcy proceedings, garnishment of wages, traffic summonses, civil suits for damages, and so on. The cumulative effect of all of this may have been to crystallize certain attitudes in the patient, for example, a distrust of and cynicism about the system, leading to a lack of acceptance of court decisions or of attorneys' advice. The more aggressive and self-confident individual might resolve to challenge and, if possible, to overturn the disposition of his case. To accomplish this he initiates legal moves of his own, usually in the form of writs addressed directly to the courts—sometimes to the original court that sentenced him but more often to state courts of appeal or to federal courts. A patient or prisoner may have several appeals in motion simultaneously. The conscious motivation for this behavior may be expressed as a device to cut through red tape, to circumvent, to eliminate lengthy delays, or to point out omissions or mistakes. On a deeper level it may represent the expression of omnipotent fantasies, the idea that oppressive external forces can be routed by a stroke of the pen.

The magic is not only in the written communication itself but also in the arcane, stylized phraseology so peculiar to legal documents. The inmate who can become familiar with legal processes and who can truly understand not only court proceedings but also the mechanism of the law that can modify, relieve, or aggravate his situation may earn prestige and respect from fellow inmates and may be called upon to initiate legal proceedings for them. His advice may be sought and his legalistic talk received with deference by fellow inmates and even by the staff. Since the majority of prisoners and patients on forensic psychiatry units lack a formal education (a survey in Arizona State Prison in 1971 showed that only three percent of the inmates had received a high school diploma), a man who can read law books, understand the content of court orders, and write a reasonable facsimile of what appears in a legal document can quickly gain impressive stature.

REDRESSING GRIEVANCES

It is hardly surprising that many of the nation's 300,000 prisoners are discontented with their lot and would like to achieve changes faster than society is ready or willing to grant them. Recent changes affecting the rights of prisoners at the time of arrest or at any subsequent time have focused attention on the many possibilities of procedural and judicial error in the handling and disposition of the offender, whether he is mentally ill or not.

If the minutely prescribed rules are not followed to the letter throughout the entire process of arrest, trial, and sentencing, the prisoner-inmate has the option of moving to reverse a decision based on an error if he feels that his situation will be improved by so doing. Not only might his freedom hang in the balance, but the possibility of monetary indemnification may also be pursued as an additional prize.

Every day, decisions are reversed and appeals are successful as the courts strive to refine the administration of the law and to ensure constitutional guarantees. Thus, a constant flow of encouraging news may be noted and absorbed by whoever tries to beat the system. The prisons, the philosophy of confinement, and the concept of punishment have all been questioned, reexamined, and attacked to such a degree that confinement or involuntary commitment may seem intrinsically wrong to the inmate, especially to one who agrees with the criticism but who is not interested in constructive alternatives. Therefore, there is incentive, encouragement, and opportunity to do something about one's situation, and to some prison inmates the existing framework of the courts seems to be the most ideal vehicle for such efforts.

The courts may be used to redress grievances associated with the inmate's current status and living conditions, as well as those relating to his legal disposition. He may complain about the handling of his mail, access to visitors, food, attention to medical complaints, assaults on his person by other inmates or by staff members, deprivation of any aspect of his civil rights, absence of recreation, or any feature of institutional life that does not appeal to him.

Complaints may be based on delusional beliefs and may involve political or other public figures. The writer of writs may pursue only one issue, carrying his brooding resentment over one theme as his major preoccupation for months or years; or he may jump from one issue to another, taking up the cudgel for others when he tires of his own problems. He may collaborate with his attorney or only render lip service to him, feeling that his own ideas and strategies are more subtle and farseeing. Often the patient will express dissatisfaction with the lawyer, announce that he is about to fire him, and request the court to appoint another one. The process may be repeated, with one patient going through several changes of

attorney in the course of litigation. Here, the inference is strong that the patient has his own ideas as to how his case should be conducted, and professional advice may be suspect.

The use of law books and journals may be requested; recent court decisions have affirmed prisoners' rights to have an extensive law library made available for their use in preparing legal documents and as resources in researching remedies available to them. These decisions reflect a growing awareness of the inmate's sensitivity to his rights and privileges. Many inmates will keep a file of briefs, examination reports, copies of correspondence, court orders, and other case-related material. This may be carefully stored out of sight or ostentatiously worked on in a conspicuous location. Attention to spelling, punctuation, and sentence construction signifies the inmate's desire not to be regarded as naïve or ignorant. Acknowledgment by the court of his letter indicates that he has made an appropriate contact and encourages further effort.

No single diagnostic category of mental illness is identifiable as being most likely to produce the writ writer. Sociopathy is clearly a prevalent condition on a forensic psychiatry unit but is by no means applicable to all patients. The writer who harps on one theme for years, refusing to accept the judgment of any court and generalizing his complaint to society at large, is more likely to be a paranoid personality, if not schizophrenic. The patient who writes with a sense of urgency in response to an immediate situation may be the victim of an acute anxiety attack. A few patients may not have any mental disorder or be particularly sociopathic, but rather, may be inappropriately placed and pursue their legal rights in a persistent and reasoned manner.

A number of such patients have been seen on the Forensic Psychiatry Unit of the Arizona State Hospital during the past two years; some of these cases are presented here. All but one have served or are serving terms in the Arizona State Prison. None of these men is considered psychotic. The other patient, who is psychotic, has been hospitalized continuously since 1964.

CASE REPORTS

Case 1. This 49-year-old man was committed to the hospital in 1964 on the grounds that he was unable to assist in his own defense, the court specifying that he should remain in the hospital until he was found competent to stand trial. He had been charged with murder in the shooting of his seven-month-old daughter. His resentment of his commitment, which he described as "railroading," was compounded by the court's finding him incompetent and appointing a guardian to take care of his estate.

The patient had been diagnosed as a paranoid schizophrenic. His letters to the courts have had regard to alleged violations of constitutional rights and evoked responses from the judge of the federal district court and the presiding judge of the county superior court, both of whom expressed concern at the amount of mail directed to them and advised the patient that the federal courts could not act until all possible remedies through the state courts had been exhausted. The patient told staff members that he would force the psychiatrist to release him because of the writs he had filed. He alleged that his hospitalization was a political plot and made an escape gesture to "force the hospital into a showdown." He was obsessively concerned with following regulations the "right" way and with forcing a rigid interpretation of ward management policies on other patients.

Prognosis for this patient is poor, and his writs reflect a lack of flexibility in thinking, a persistent hostility and mistrust, and a sustained persecutory trend. In this instance the writ communicates in a tangible form the patient's expressed belief that his commitment results from an elaborate conspiracy; putting his statements on paper gives him a permanent record to refer to so that he can exclude the possibility of being misquoted and so that he will be less likely to contradict himself.

Case 2. This 26-year-old unmarried man was readmitted to the hospital in December 1971, having been charged with aggravated assault on a deputy in the local jail. He had been confined to the jail since his earlier discharge from the hospital nine months previously. This patient had a long history of confinement in jails, prisons, and forensic psychiatry units in several different states. He stated that during his recent confinement in jail, the personnel had trampled on his rights by taking his dictionary and legal papers from him. He stated that he had incurred the enmity of the deputies by preparing writs for other inmates, resulting in the freeing of several of them.

In addition to facing the charge of aggravated assault, the patient is appealing a conviction for armed robbery for which he had been sentenced to a long term of imprisonment. The patient perceived a number of legal errors and what he considered to be injustices in his case; for example, the probation report prepared prior to his sentencing had referred to a charge of sodomy, which the patient explained as having allegedly taken place when he was nine years old and as amounting to no more than sex play between children. During his hospitalization, he became involved in a number of other activities such as knitting sweaters to sell and crocheting. These activities were a little incongruous in a muscular, athletic-looking, and occasionally aggressive young man. They were explained on the basis of his need to have funds to pay for his legal expenses, including the cost of paper, typing, notarizing, and mailing. The patient was particularly sensitive to what he perceived as any misuse of authority and expressed himself forcibly and bluntly when he felt the occasion called for it.

The patient had prepared a writ addressed to the United States Court of Appeals for the Ninth Circuit in the form of a motion for appointment of counsel to represent his appeal cause. On admission in 1971, the patient was found to be without a mental disorder and was again returned to court for the disposition of charges. Although his formal education had not progressed beyond the fourth-grade level, this patient was highly skilled in presenting his case to the courts, in researching legal documents, and in retaining detailed information about his previous experiences in court.

Case 3. This 31-year-old unmarried man was transferred to the hospital from the state prison for evaluation and treatment. He had spent 11 years in the prison, having been convicted at the age of 20 of first-degree murder. Recently while in the prison he had developed an acute anxiety attack in response to racial tension in general and, specifically, to sexual assaults by one racial group on a number of younger patients. The patient responded to this by exaggerating the extent of the situation and by addressing numerous letters to state officials, including the Governor of Arizona, the chairman of the parole board, and the

governor of his own state in the South. He prepared a lengthy writ for transmission to the United States District Court in which he referred to earlier certified letters he had addressed to the governor and to the Department of Corrections. On admission to the hospital, he focused his conversation on the situation in the prison that had led to his civil commitment and that he sought to have exposed as a major scandal by having it aired in federal court.

This patient has spent much of his time in prison reading and studying law books and had been the author of several writs in the past. Since he came from a southern state, he felt that, naturally and instinctively, he would rebel against many of the practices and policies at the prison and that his philosophy would not be acceptable to prison authorities. To get around this situation he used the threat of court action to correct or influence situations that were not to his liking.

The patient's transfer from prison was soon followed by a more flexible approach to racial and social situations. The writ writing diminished; he became aware of his tendency to try to intimidate people by this maneuver and withdrew several letters and writs that he had prepared. In this instance the writ was used as a defense against an intolerable and sometimes overwhelming situation. The patient has been employed in the mailroom in the prison, and his quasi-clerical status has given him some additional prestige.

CONCLUSIONS

The writ writer is most likely to be seen on the forensic psychiatry unit of a state hospital. He is very often indigent, has a limited formal education, and is of average or better than average intelligence. In two of the three cases cited the patients' diagnosis was antisocial personality. The absence of psychotic illness in these two patients resulted in a greater degree of flexibility and imagination in their coping with problems arising out of conflict with the law; this contrasts with the schizophrenic patient, who obsessively focused his attention on one area of alleged injustice or unfairness.

Patients who habitually write writs have a need to use legal books and dictionaries, constantly endeavor to broaden their vocabulary, and tend to confide in an attorney rather than in a psychiatrist. The psychiatrist on the forensic unit is often approached with some suspicion since he is perceived as a state employee, as being part of the state establishment, and as a challenge to the patient's assumed state of illness.

Writing writs is part of the overall communications process a patient engages in; letters to attorneys, relatives, and friends and notes to psychiatrists and other treating personnel are other aspects of this communications effort. In the case of a patient of average or better than average intelligence who has been frustrated and limited by poor educational opportunities, the formal language of legal documents affords him a structure and workable tool in his effort to modify an adverse situation. The threat of legal action may also be used as a deterrent from abuse or from disregard of the patient-inmates' privileges in prison, jail, or the hospital. As increasing awareness of legal complexities is thrust upon the public—including offenders, patients, hospital staff, and attorneys—more writs will be written, more communications initiated, and more short-circuiting contacts made.

The Attitudes of Patients and Aides Toward the Role of the Psychiatric Aide

BY LEONARD HANDLER, PH.D., AND GERALD PERLMAN, PH.D.

It has been difficult to evolve a system whereby psychiatric aides can be effectively selected and oriented to their roles. In an attempt to involve the patient in an evaluation of the aide's role, the authors interviewed 80 patients as well as 40 aides. Regarding the aide's function, patients were significantly more concerned than aides with humanistic, as opposed to custodial, values. "Humanistic" aides were evaluated significantly more favorably by patients than were "custodial" aides.

NEUROPSYCHIATRIC HOSPITALS have typically employed poorly educated and/or emotionally unstable individuals as psychiatric aides. Yet the aide is with the patient for a longer period of time than any other hospital employee, and he therefore plays a crucial role in patient treatment. In many cases, interaction with the aide is the only contact a patient has with any staff member for long periods of time. One major problem in this area has been to evolve a system whereby aides can be selected more effectively.

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The authors wish to thank the staff and patients at Eastern State Psychiatric Hospital who participated in this study.

A great deal of research has been done in an effort to determine the personal qualities of the "good" aide. However, early studies seemed to emphasize efficiency, as determined by personnel ratings by superiors (1–3); little effort was made to define what supervisory personnel meant by "good" or "poor" adjustment. Thus the more satisfactory aide was probably one who was on time, was seldom absent, and who caused no trouble. This approach is totally lacking in any broad conception of the meaningfulness of patient-aide interaction.

The criterion problem has been emphasized by Yerbury, Holzberg, and Alessi (4), Schmidt and Cohen (5), and by Tarjan, Shotwell, and Dingman (6). The latter authors found that nursing supervisors felt conservatism, passivity, and introversion were the best signs of a good aide, while professional staff felt that the better aide was more outgoing and opinionated. Hamister (7), in what appears to be the first attempt to include patients' judgments as a criterion for evaluating aides, attempted to determine whether there was agreement among doctors, nurses, and patients as to the effectiveness of aides. Patients were more concerned with kindness and approachability, while the staff was concerned with the smooth running of the ward. However, while the staff was asked about the effectiveness of aides, the patients were merely asked to choose between best- and least-liked aides, in various comparisons. Thus the two groups were actually asked different questions. The best-liked aide is not necessarily the most efficient.

We believe that if the aide is considered to be an integral part of the healing situation, one of the most important judges of his success must of necessity be the patients with whom he interacts. Therefore this study was designed to follow the leads suggested in previous research, while attempting to reflect the views of both aides *and* patients. The following hypotheses were generated:

1. There will be a significant difference between patients' and aides' attitudes toward the role of the aide, with patients more concerned with humanistic as opposed to custodial values, and conversely, aides more concerned with custodial values.
2. Aides with a more humanistic approach will be more highly evaluated by patients and, conversely, those with a more custodial approach will be less highly regarded by patients.

METHOD

The data were collected at a large state mental hospital in Tennessee. The variables examined included sex, open versus closed ward placement, and length of hospitalization. Long-term hospitalization was considered to be any period over six months. Ten patients were questioned in each of the following eight cells: open-ward, long-term men; open-ward, long-term women; closed-ward, long-term men; closed-ward, long-term women; open-ward, short-term men; open-ward, short-term women; closed-ward, short-term men; and closed-ward, short-term women.

Aides were questioned according to the cell breakdown used for patients, thus including aides working in open and closed wards, with long- and short-term hospitalized patients, and with men and women. Representatives of both the day and evening shifts were used. Within each cell, three day aides and two night aides were questioned, comprising a total of five for each cell and a grand total of 40 aides, 20 men and 20 women.

The Custodial-Humanistic (C-H) Scale

In a pilot study, a random sample of patients and aides were interviewed concerning what each felt the functions of the aide should be. From these results a 15-item rating scale was devised that consisted of statements regarding various ward functions. Each statement was scaled 1 to 4, from "extremely important" to "not at all important." Prior to administration of the scale, cutoff scores were devised.

The Evaluation (E) Scale

For the patients' evaluations of the aides, a patient rating scale was used, consisting of 11 questions regarding actual behavior of the aide in question (8). Cutoff points were determined prior to administration of the scale.

Procedure

Patients and aides were approached and told the following: "We are doing a study to see how patients and aides feel about the role of the aide on the ward. We would appreciate your giving your opinion about the following statements. No names are being taken, so please feel free to answer truthfully."

The C-H Scale consisted of the following 15 items:

The aide should always obey the rules of the ward.

The aide makes sure the patients receive their medicine.

The aide must never lose his temper in front of patients.

The aide is willing to talk to patients on a personal basis.

The aide sees that the ward is kept quiet at all times.

The aide gives patients the chance to do things on their own.

The aide should never let the patient know he has made a mistake in working with the patient.

The aide treats patients as his equal.

The aide gets to work right on time.

The aide sometimes gives patients cigarettes or other treats.

If a patient breaks any rules at all, he should be punished.

The aide should be understanding of the patient's individual problems.

The aide sees that the patients do not get into fights on the ward.

The aide should sometimes put his own work aside to talk to patients.

The aide treats all patients the same.

The scales were verbally administered. For each ward used, aides were approached individually and were given

the C-H Scale. Then the same scale was individually administered to the patient. After he had completed the initial scale, each aide was pointed out to the patient, who then responded to items on the second scale concerning his feelings about the particular aide in question. The procedure was conducted on eight wards, and a total of 80 patients and 40 aides were utilized. Thus each aide received five patient evaluations, with one-half of the patients rating three aides and the other half rating two aides. Patients and aides were classified as either low, medium, or high based on each of the two scales. The mean of the five patient evaluations for each aide was then obtained, and each aide was placed in a low, medium, or high group for the 11-item E Scale.

RESULTS

A three-way analysis of variance was computed for the patient versus aide, open versus closed ward, and long- versus short-term hospitalization variables for the C-H Scale results. Patients were significantly more humanistic in their attitudes than the aides were ($F = 75.8$, $p < .001$). There was no significant difference between the scores of open- and closed-ward subjects (both patients and aides). Patients and aides involved with short-term hospitalization were significantly more humanistic in their attitudes than were those involved in long-term hospitalization ($F = 3.93$, $.05 > p > .025$). There were no significant interactions among the three variables. Thus patients were more humanistic than aides, whether they were in open or closed wards and whether they were short- or long-term hospitalized patients. Patients and aides involved in short-term hospitalization were more humanistic than those involved in long-term hospitalization, whether they were in open or closed wards. The results therefore support our first hypothesis.

To determine whether these results were due to differences in age and/or education for the patients and the aides in the various subgroups studied, the mean ages and mean years of education were calculated for each subgroup. The mean age for the aides was 38.7 years and for the patients, 40.3 years. The mean ages for long- and short-term hospitalization subjects were 40.7 and 38.9 years, respectively. Both of these differences are nonsignificant. Similar findings were obtained for level of education. Aides and patients had an average of 8.06 years and 8.03 years of education, respectively; the educational levels for long- and short-term hospitalization subjects were 8.3 years and 8.6 years, respectively. Thus the significant differences in degree of humanism between patients and aides and between long- and short-term hospitalization subjects are not artifacts of differences in age or level of education.

Chi-square analysis was employed to determine whether there were any sex differences in the degree of humanism expressed in the questionnaire. A nonsignificant chi-square value ($\chi^2 = .44$) was obtained for the patient data, and a chi-square value of 5.50 ($.10 > p > .05$) was obtained for the aide data. Thus there is a suggestion that female aides are more humanistic in their conception of their ward functions than are male aides.

The age of the patient was not a significant factor in his humanistic view. A chi-square value of 4.44 ($.20 > p > .10$) was obtained for younger patients (under age 35) versus older patients. When the age of the aides is considered, the results indicate that younger aides (age 35 or under) are significantly more humanistic in their orientation than those over 35 ($\chi^2 = 14.3$, $p < .01$).

The better-educated patients (ninth-grade education or higher) had a significantly greater humanistic outlook than did less well-educated patients ($\chi^2 = 8.60$, $p < .02$). The results were not significant for aides with regard to education ($\chi^2 = 3.89$, $.20 > p > .10$).

A chi-square analysis was employed to determine the relationship between the degree of the aide's humanism and the patient's evaluation. Those aides with a more humanistic viewpoint toward their role were evaluated significantly more favorably by patients, and conversely, those aides with custodial viewpoints were less favorably regarded ($\chi^2 = 21.09$, $p < .01$). These results confirm our second hypothesis.

The age of the aides was found to be an important factor in their evaluation by patients. Younger aides were rated significantly more favorably than their older colleagues ($\chi^2 = 9.06$, $p. < .02$). This finding is to be anticipated in light of the fact that younger aides were found to be significantly more humanistic in outlook. There was no significant difference between aides' sex or level of education and their evaluation by patients ($\chi^2 = .406$ and 1.97, respectively).

DISCUSSION

The hypothesis that patients would be significantly more humanistic than aides regarding their concept of the aides' function was confirmed. Aides were significantly more custodial in their outlook across all wards sampled. Patients and aides had different views of what the aide should do on the ward. The patient was concerned about being treated with consideration, while the aide was most concerned with keeping order and obeying the rules.

The nonsignificant findings for the closed ward-open ward variable could be due to the rotation of aides on the various wards; an aide does not necessarily work on one ward for a long period of time. Therefore his concept of the aide's role in the hospital is based upon his total hospital experience.

Short-term patients and their aides were more humanistic than long-term patients and aides. The longer the patients and aides stay in the hospital, the more custodial their concept of the aide's role becomes. This may be due to the effect of hospital routine on the patient and aide; the longer they are there, apparently, the less they expect or give in the way of decent treatment.

These data suggest that employment per se could change the aide's outlook from what it had been when he started his job. Thus, while he may have had a humanistic

outlook when he was first employed, his steady interaction with patients and the hospital structure might combine to gradually alter his viewpoint to that of custodian. Age is essentially unimportant; length of employment is the relevant factor. When patients evaluated aides, they evaluated younger aides more favorably than those who were older. Again, this can be explained as an artifact of length of employment and the development of a custodial viewpoint.

The findings of this study underline the importance of carefully reviewing and reevaluating ward procedures and policies in the neuropsychiatric setting. The gross differences in patient and aide expectancy can hardly make for an effective treatment program. Although always subject to a certain amount of interpretation by staff, hospital policy is usually dictated by the administrative personnel. While joint policy-making meetings between patients and aides might be helpful, we feel that ward procedures will change only if administrative personnel are brought into the picture and are involved in attempts to produce effective treatment programs. Changes in ward procedures and in the attitudes of personnel and patients will be brought about only if the entire patient care delivery *system* is understood by all those employed within it.

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IN MEMORIAM

Bernard Glueck, Sr.
1884–1972

A MAN OF UNUSUALLY BROAD INTERESTS, Dr. Bernard Glueck will long be remembered for his uncanny intuition for innovations that made lasting contributions to psychiatric history. After a long and illustrious career in his chosen profession, Dr. Glueck died October 5, 1972, at his home in Butner, N.C., at the age of 88.

Born in Poland in 1884, he came to America in 1900. He went first to Chicago and then lived for a short time in Milwaukee. He received his M.D. degree from Georgetown University Medical School in 1909 and shortly thereafter joined the U.S. Public Health Service on assignment to St. Elizabeths Hospital in Washington, D.C. In 1913 he was assigned to be a psychiatrist for the Port of New York. In order to help screen the incoming immigrants who spoke a variety of languages, he devised the Glueck Ship Test, a simple test not dependent on language skills. He returned to St. Elizabeths Hospital the following year as a psychiatrist on the Howard Hall Service for the Criminally Insane. During this period (1913–1915) he developed many of his ideas about prisons and forensic psychiatry.

In 1915 he organized the first prison psychiatric clinic in the United States in Sing Sing prison at Ossining, N.Y. He left this post to serve as a captain in the Medical Corps of the U.S. Army in 1918. After leaving the Army he was appointed to the staff of the New York School of Social Work, where he organized a department of mental health and did pioneer work in making psychiatry a major field of instruction. From 1918 to 1923 he was director of the New York Bureau of Child Guidance; during this period he set up the "team" approach, which was to exert great influence on child psychiatry in this country.

In 1927 he established Stony Lodge in Ossining, N.Y., one of the first private hospitals for the psychoanalytic treatment of the mentally ill. While director of this pioneering hospital, he never lost sight of developments in other fields of psychiatry. During one of his frequent trips to Europe in the mid-thirties he observed the work of Manfred Sakel on insulin therapy for schizophrenia. He was so impressed that he wrote the first article on the subject to be published in a major journal in this country. At his own expense he arranged for Dr. Sakel to come to New York to demonstrate his new treatment methods.

Dr. Glueck was a member of many medical organizations including the American Medical Association, the American Psychiatric Association, and the American Psychoanalytic Association. He was particularly active in the American Psychopathological Association, serving as its president in 1945; in 1958 the association honored him by giving him the Samuel W. Hamilton Award.

He wrote over 60 papers on various aspects of psychiatry, ranging from prison psychiatry to psychoanalysis, from insulin treatment to problems of childhood. He was the author of a book titled *Studies in Forensic Psychiatry* and was the translator of important books by Adler, Schilder, and Alexander. During the twenties he was much in demand as a psychiatric expert witness and was one of the psychiatrists called to Chicago by Clarence Darrow to testify in the famous Loeb-Leopold trial in 1924.

Dr. Glueck retired from the directorship of Stony Lodge in 1946 and eventually returned to Washington, D.C., where he worked in several of the outpatient clinics of the Veterans Administration. In 1956 he joined the faculty of the University of North Carolina at Chapel Hill, where he served until he was disabled by a stroke in 1964. During this same period he was senior consultant in psychiatry at the John Umstead Hospital at Butner.

He is survived by his wife, Betty J. Glueck, of Butner; a son (also a psychiatrist), Dr. Bernard Glueck, Jr., of West Hartford, Conn.; a daughter, Dr. Ruth Addison, of Elizabethtown, N.Y.; a brother, Professor Sheldon Glueck of Cambridge, Mass.; two sisters, Mrs. Robert Phillipson and Mrs. Nathan Golden of Washington, D.C.; and five grandchildren.

An imposing figure of a man with his huge frame and massive shock of white hair, he was a familiar sight at psychiatric meetings and made an unforgettable impression whenever he appeared. Invariably kind and patient, he gave younger men freely of his time and shared with them his rich clinical experiences. One of these experiences, which he shared with me, is so characteristic of Dr. Glueck that it bears retelling. During his years of active psychoanalytic practice he once received as a gift a copy of a popular book on law written by one of his analysands who was a famous jurist. The analysis had been eminently successful and on the flyleaf of the book the grateful patient had written the following perceptive inscription: "To Dr. Bernard Glueck—who taught me so many things I already knew." Stories such as this could be repeated by the score and will make Dr. Glueck unforgettable to all who ever knew him.

ZIGMOND M. LEBENSOHN, M.D.

LETTERS TO THE EDITOR

Review Reviewed

SIR: Since the 30-odd books I issued before volume 10 of *Current Psychiatric Therapies* received quite favorable notices both as to content and organization, it would seem picayune to cavil at Dr. David Swenson's recent critique of my editing of that opus (Book Reviews, April 1972 issue). Nevertheless, permit me to quote a few whimsical samples from his review.

"The major categories are inconsistent from volume to volume." True, and so it shall be, since the *Current Psychiatric Therapies* series is intended to reflect varying clinical interests from year to year.

"Although alcoholism is of major importance, there are many other serious addictive and dependency states involving the use of opiates, barbiturates, amphetamines, and many other drugs." True again, but all of them had been treated in special chapters in preceding editions and in two later editions.

"The index of names and the index of subjects are omitted from the table of contents." True once more, on the reasonable supposition that readers other than Dr. Swenson would know that they appear at the end of every book.

"Names and terms in the index are incorrectly referenced." Indices are prepared by a clerk, not the editor, and a representative check revealed only about 22 errors among more than 2,000 entries.

And most amusing: "The content of the articles . . . are generally very good." Yet later: "One also cannot help but wonder about the other aspects of editing, such as selecting and editing the manuscripts and dealing with the authors. . . ." As I explained in the preface, these "aspects," including requesting manuscripts, editing them, and doing considerable rewriting when necessary are indeed the editor's principal responsibility, and I appreciate Dr. Swenson's paradoxical but implicit commendation in this regard.

Should not book reviews also occasionally be edited?

JULES H. MASSERMAN, M.D.
Chicago, Ill.

Editor's Note: Yep, they are edited—but not censored.

Dr. Swenson Replies

SIR: In response to Dr. Masserman I am sorry that he appears to take offense at my review; however, the fact remains —the book was poorly edited.

I will answer his objections in the order of their appearance in his letter.

If one carries a theme designated as a major category from year to year in a series, the theme should be consistent. If changes or modifications are made, they should be well thought out and intentional. The themes should flow smoothly through the series, and if they change too much or too frequently, either poor titles for the major categories were chosen or the titles were whimsically chosen. If the categories change capriciously from volume to volume, how well organized are the topics in the editor's mind? Does he really look at the previous volumes in considering topics for future volumes? If there is no continuity in the series, why is it a series?

A few examples of these inconsistencies follow: "Adult Techniques" in volume 10 was "The Adult" in volume 9; "Individual Therapies" in volume 8, "Individual Psychotherapy" in volume 7; "Adult Psychotherapy" in volume 6, "Individual Psychotherapy" in volume 5 and "Special Techniques with Adults" in volume 4. From the major category titles and the articles listed under them the subjects appear to be very similar, if not identical, and yet the title of the major category changes from volume to volume as if each book was autonomous and not a part of a series.

Another example is "The Child" in volumes 9 and 10, which appeared as "Child and Adolescent" in volume 8, "Child and Adolescent Therapy" in volume 7, "Childhood and Adolescence" in volumes 5, 4, 3, and 2, and "Child and Adolescent" in volume 1.

As for Dr. Masserman's second objection to my review, I still hold that alcoholism is covered more extensively than other addictive and dependency states; for example, volume 10 had four articles on alcoholism and one article on the treatment of heroin "dependence"; volume 9 had one article on alcoholism and one article on "Non-narcotic Psychoactive Drug Dependence"; volume 8 had a major category and three articles on alcoholism and only one article on "Untoward L.S.D. Reactions"; volume 7 had one article on alcoholism and one article on "Cyclazocine in the Treatment of Narcotic Addiction." As far as two later volumes' correcting the inequities, I cannot say, except that the following volume (11) has no articles on alcoholism or drug addiction. Therefore, from the 1967 through the 1971 volumes there have been nine articles on alcoholism and four articles on all the other drug addictions and dependencies combined. That does not appear to me to accurately reflect the "varying clinical interests from year to year" in alcoholism and drug dependency.

As far as omitting the index of names and index of subjects from the table of contents, if everyone knows where they were, why were they listed in the table of contents of all previous volumes? As an editor, I would suspect the index was inadvertently left off the table of contents since it appeared in some form in all the previous volumes. It also seems that the editor cannot make up his mind whether to use "name index" or "index of names," "subject index" or "index of subjects" from volume to volume and even from tables of contents to the sections in the same books. Again, this is a sign of poor editing.

Paying attention to details is an extremely important part of editing. Unfortunately it is not very exciting, but every mistake is multiplied by the number of copies produced and is recorded for all readers to see. If an editor does not want to bother with the monotonous aspects of organizing the publication and editing the manuscripts, galleys, and page proofs, he may also avoid other monotonous aspects of editing, such as making sure he is really reflecting the varying clinical interests from year to year rather than just including in the publication what *he thinks* are the major interests without conscientiously checking them out. Does he take the time and energy to rework a mediocre manuscript on a new or interesting or exciting subject, or does he primarily rely on well-written manuscripts regardless of the topic?

And a good editor should be able to tolerate points of view that differ from his own.

As for errors in the index, the editor, not the clerk, is responsible for what is published; wouldn't it have been better editing to find those 22 errors prior to publication?

Since he should be aware that the book reviews are edited, Dr. Masserman's last question is not clear. Perhaps he means book reviews that are not entirely favorable to him should not be published.

DAVID D. SWENSON, M.D.
Wakefield, Mass.

Journal's Culpa?

SIR: With regard to "The Function of the Dream: A Reappraisal" by Dr. Zvi Giora (March 1972 issue) let me begin by stating that I am disappointed to read an article of such low caliber in the *Journal*.

The author condenses his ideas of the dream theories of Freud, Jung, and Adler into single sentences, none of which is correct due to both inadequacy and inaccuracy. Having set up false targets, he uses the rest of the article to shoot them down. It is revealing that in his list of 24 references, none of the three men he attacks is cited. The fact seems obvious that he is *not* conversant with the works of Freud, Jung, and Adler. His article seems to be a rather dull diatribe that only bears out his "conclusion" that cognition is the "self-same through all levels of existence," presumably referring to rapid eye movement (REM) and non-REM (NREM) sleep, wakefulness, daydreaming, fantasy, fever, skull fracture, etc.

I regret that members of the editorial department allowed this to be published. Presumably their running knowledge of the works of the leaders of psychological dream theory is sufficient to allow them to perceive the trick of substituting a part for the whole.

JULIUS C. TRAVIS
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Dr. Giora Replies

In the only sentence that might be regarded as substantive in his letter, Dr. Travis quotes me as concluding that "cognition is 'the self-same through all levels of existence.' "

The final sentence of my article reads: "The function of cognition will be the self-same throughout all levels of existence . . .," namely, information processing. The précis of the article ends as follows: "Cognition . . . does not change its function through the various states of mind, but its level of organization shifts from state to state."

This is the thesis of my article, and it is stated in it twice. Dr. Travis may judge for himself who is guilty of substituting the part for the whole, thus shooting down false targets.

Putting psychoanalysis in the general frame of information and systems theory, Peterfreund (1) wrote:

> I am taking a unified approach to the phenomena of sleep and waking. In both cases psychological experiences are conceptualized as phenomena which correspond to or parallel the various ever-present information processes in the central nervous system. These experiences include thought, fantasy, and feeling, as well as awareness—the familiar awareness or consciousness of waking, and the awareness or consciousness of sleep, the phenomenon called a dream. Differences in these phenomena are explained in terms of differences in the way information is processed (1, p. 245).

In what follows he explains that during sleep we operate at a lower level of organization, i.e., with diminished inputs and restricted programming: "Although there are fundamental differences in the programming and information inputs during waking and sleep, information processing is continuous."

In the opinion of West (2) dreaming is an experience that occurs when there is a condition of inhibited information input accompanied by cortical arousal. This explains the quality of that information. This change of qualities notwithstanding, "information . . . is continually . . . processed by the living human brain."

This view is substantiated by the well-known fact that mental contents are produced both during REM and NREM periods. The living brain, indeed, never ceases to process information. Therefore we need not speculate about why we dream. Dreaming is one of the phenomena of cognition and has the same function as the other related phenomena. Consequently, in an attempt to understand dreams one has to change his focus and concentrate on the special conditions responsible for dreaming.

Second, the characteristics of dreamy mentation are not contingent upon sleep. Fiss and associates (3) found that subjects who were awakened from REM sleep made up TAT stories that were longer and more complex, visual, bizarre, emotional, and vivid than stories produced after interrupted NREM sleep. That is to say, the distinguishing properties of a sleep stage are not "switched off" following awakening but may continue into the waking state. That dreamy mentation occurs while one is awake will certainly not support theories that rely on an exclusive connection between sleep and dreams.

Such a theory is Freud's dictum that "the normal role" (4) of the dream is to function as a guardian of sleep. What might the dreamy mentation guard while one is awake?

Finally, I would like to note that, as is rather well known, some opponents of Freud preferred to attack him personally rather than to debate his views. To use the same "weapon" against the opponents of Freud would, indeed, be a most ironic way of defending psychoanalysis.

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Psyching Out Psi

SIR: Dr. Stanley R. Dean's Letter to the Editor about "Metapsychiatry and the Ultraconscious" (November 1971 issue) came at a propitious time, followed as it was by the Symposium on "Science and Psi: Transcultural Trends," at the 1972 APA

annual meeting in Dallas, Tex., in which Dr. Dean served as coordinator and Dr. Howard Rome as moderator. The study of psychical or psi phenomena has recently won the nod of the American Association for the Advancement of Science. The Parapsychological Association has been admitted to membership, and psychic research is thus well on its way toward integration with other behavioral sciences.

A number of university centers in this country and abroad are engaged in methodical investigations of telepathy, clairvoyance, precognition, psychokinesis, and attempts at unorthodox healing. The general public, broad segments of inquiring youth, and many of our patients are concerned with psi phenomena but grope in the dark or turn for guidance to charlatans and amateur investigators. Some of the research done by experimental parapsychologists is extremely relevant to clinical psychiatry, but most psychiatrists are unfamiliar with it. Or else genuine psi phenomena that may be encountered in psychiatric practice are summarily dismissed as delusion, fraud, or self-deception. Significant contributions made by well-versed psychiatrists are only perfunctorily reviewed in the literature.

Dr. Dean's suggestion to establish an American Metapsychiatric Association and an APA Task Force on Psychic Research or Parapsychology should be hailed by our profession. There can be no doubt that current research warrants a new, open-minded approach to the matter. Whether or not we are dealing here with a new aspect of the unconscious or with altered states of consciousness *and* intentionality deserves serious professional attention and evaluation, as does the relationship of these phenomena to ecstasy, mystical experiences, hypnosis, faith healing, and the like. In particular, attention should be focused on the possibility of psi phenomena in dreams, psychotic reactions, paranoid delusions, alleged reincarnation, and out-of-the-body experiences, as well as in psychotherapy and in primitive healing in various cultures, including our own.

I think, however, that Dr. Dean should clarify his reasons for the need of yet another organization such as the proposed American Metapsychiatric Association (AMPA), and he should make it clear if AMPA would function independently or in liaison with existing organizations.

The important point is to clear the deck for an informed interdisciplinary discussion of the problems; APA should be an active participant in this discussion.

JAN EHRENWALD, M.D.
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Self-Enucleation: Further Views

SIR: The following account concerns a consultation made in December 1971. I made independent observations that were parallel to and tend to support the speculations of Drs. Rosen and Hoffman in their interesting article "Focal Suicide: Self-Enucleation by Two Young Psychotic Individuals" (February 1972 issue).

The patient was a 22-year-old single male convict who had persistently expressed a desire to have his eyes surgically removed. He had put lighter fluid in his eyes and had been observed poking a lighted cigarette at them. He stated that he wanted to be blind in order "not to see the bad things in the world," such as the "many innocent people who are going to die because of their beliefs next year." After having become blind, he planned to go to a mountaintop and "finish dying" there, after which he would go to another "astral plane." He had made one known suicide attempt, which had been preceded by having his ear pierced.

The patient was the second oldest of five children. His mother often complained of being cursed with the evil eye, and the family believed in black magic. His father had a criminal record and left the family when the patient was age five.

At age 11, when his mother had a "nervous breakdown," he was placed in a foster home. His foster mother seduced him, and he frequently had intercourse with her for about one year.

After dropping out of high school, he enlisted in the Marines and served in Viet Nam. He was court-martialed for having been AWOL several times. His drug use included marijuana and heroin, and he had had several hundred trips on LSD.

Particularly revealing was a vivid dream he had when he was about age 11. He was watching the Last Supper in a house. The house began to rise, going up to Heaven, and the patient grasped a windowsill so that he would be taken along. As the house rose, a pit of snakes was revealed beneath it. He lost his grip and fell into the pit of snakes. The dream then changed to his being alone in a closet. Someone opened the closet and told him he was dead.

A mental status examination revealed blunted affect with appropriate variations, some paranoid ideation, but no current hallucinatory material. His insight and judgment were impaired, and his intelligence was estimated at low normal.

He was transferred to a prison psychiatric facility, where, after several months of supportive therapy without psychotropic medication, he gave up the desire for self-enucleation.

In my discussion of the case I commented that the patient was "really aiming for self-destruction, not just decrease of one specific sensory input." The dream material seemed to indicate both castration anxiety and a wish for self-obliteration, the latter possibly stemming from the former. As with the patients reported by Drs. Rosen and Hoffman, there was a history of LSD usage, religious mysticism, and apparently severe problems of sexual identity.

It may be that some borderline personalities who have severe problems of self-identity, exacerbated by LSD usage, are predisposed toward focal suicide in which castration anxiety is an important motivating force.

WILLIAM GOLDSMITH, M.D.
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A Myth Unmythed

SIR: Dr. Martin Berezin in his article "Psychodynamic Considerations of Aging and the Aged: An Overview" (June 1972 issue) stated that "Rothschild undid the old myth that held to a quantitative correlation between organic brain disease and its clinical behavioral manifestations."

While there may still be many who agree with Rothschild, experimental work such as that of Corsellis (1) suggests that the old myth is not undone, not old, and not mythical.

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D. PETER BIRKETT, M.D.
Paramus, N.J.

Indian Peyotists and Alcohol

SIR: I read the article "Navajo Peyote Use: Its Apparent

Safety" by Dr. Robert Bergman (December 1971 issue) with interest. I agree with his plea that attempts should be made to study how Indians seem to use peyote—"a potentially dangerous drug"—safely.

In 1968 I conducted a comprehensive epidemiological study among a large Indian population of Saskatchewan. We were thoroughly frustrated in our attempts to make some estimates of the number of Indian alcoholics since almost every adult appeared to fall within our operational definition of an alcoholic. We therefore decided to find nondrinkers instead, and we found 20 such adults. "We observed that those adults who were once in the habit of drinking heavily, but subsequently gave it up, belonged to the Peyote Cult" (1).

Later during my association with the Saskatchewan Commission on Alcoholism, further evidence convinced me that there is a strong association between nondrinking Indians and the practice of peyote cult as a part of the Native American Church of North America. The precise nature of this association certainly merits further inquiry.

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Hyperkinetic Children and the Staccato Syndrome

SIR: In response to Dr. Ernest McCrank's Letter to the Editor "The Staccato Syndrome: A New Definition" (August 1972 issue) I would like to offer some additional remarks stemming from further clinical experience.

It appears now that the history of young people who fall into the category of the Staccato syndrome reveals that they were hyperkinetic as children. Therefore we are considering a triadic system that helps to identify this syndrome as a separate entity: 1) history of hyperkinesis, 2) onset of puberty, and 3) multiple and heavy drug abuse, especially of psychedelics.

It is important, I believe, for child psychiatrists to realize that hyperkinetic children who do not receive proper treatment might become bitter and disappointed and search for instant relief from drugs during adolescence. Fashionable as it is, drug abuse becomes a ticket to peer group acceptance. This becomes especially important to these young people since in their preadolescent years peer participation was unsuccessful. A distinction has to be made here between use of medication and drug abuse. It is clear by now to all child psychiatrists that giving medication to hyperkinetic children is not conditioning them to be victims of drug abuse. Quite the opposite, it prevents deep disenchantment and therefore protects the child to some extent from falling victim to the drug scene. The identity crisis of adolescence is well known, and quite frequently it would be a mistake to equate it with the Staccato syndrome, which occurs rarely.

In summary one can briefly state that carefully following hyperkinetic children into their adolescence would lead to more frequent diagnosis of the Staccato syndrome.

LEON TEC, M.D.
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Request for Contributors

SIR: I am planning to edit a book with the tentative title *Tennis Psychology* and am seeking contributors for it. Anyone interested in contributing to this book please write to me at the following address: Claude A. Frazier, M.D., 4-C Doctor's Park, Asheville, N.C. 28801.

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Corrections

Page 452 of the October 1972 issue of the *Journal* contains a minor error that might lead to misinterpretation of the data in the article "Methadone: Some Aspects of Its Legal and Illegal Use," by Weppner, Stephens, and Conrad. Under the heading "Extent of Methadone Use," the second sentence should read: "Further analysis also showed that 65 persons, or 19 percent, had, at some time, both used methadone illegally and participated in a legitimate methadone maintenance program, although not necessarily simultaneously."

The position of one of the authors of the article "The Psychology of Hallucinogenic Drug Discontinuers" in the December 1972 issue of the *Journal* (page 755) was stated incorrectly. Gerald E. Kochansky, Ph.D., is Associate in Psychiatry (Psychology), Harvard Medical School, rather than Assistant Professor of Psychiatry.

BOOK REVIEWS

The Coming of Age, *by Simone de Beauvoir. New York, G.P. Putnam's Sons, 1972, 585 pp., $10.*

This is not a monumental or definitive or original work, nor is it dedicated first and foremost to the nature and miseries of old age. De Beauvoir's book reflects ideology coupled with her own fear and distaste of aging.

Her effort, which she presents as "exhaustive," is marred by major flaws and numerous inaccuracies. She seems totally unaware of important scientific efforts that have endeavored to distinguish the products of disease from the effects of aging per se. Such studies are crucial to understanding the impact of time and to introducing changes into the lives of the elderly. But she vacillates among notions of age as disease, as a "law of life itself," and as a result of socioeconomic conditions. Although the table of contents suggests a comprehensive view of man as he passes through the course of the life cycle, of the interconnections of biology, personality, culture, and economics, the work reads loosely and the essentials of De Beauvoir's thesis are unclear, with the significant exception that she wants to dramatize the cruelty to which old people are subject.

The sections on historical societies and ethnology are excellent, but those on biology and psychology (and psychiatry) are very poor. De Beauvoir did not know of the studies here in the United States at the National Institutes of Health which showed that disease, not age, causes a decline in brain circulation and nutrition. She seems unaware of the extent to which malnutrition, anemia, and a host of illnesses account for the many mental and physical changes observed in old age. She appears uninformed about the landmark studies of psychological development in middle and later life. She must have worked in Parisian libraries from the armchair. Her main empirical sample must have comprised only herself, Sartre, and a few friends. She made few forays among the elderly.

Among her numerous errors are the following. She thinks that intelligence tests were invented in America. (They were devised by the French psychologists Simon and Binet.) She wrongly associates the great scientist Metchnikoff with America. She writes that Dr. Benjamin Spock was 80 in 1968.

De Beauvoir dismisses the labors of that small group of workers in many nations, the gerontologists, for their "positivistic bias" and their methods—which, unlike hers, are at least apt to be based upon empiric study. She fails to note the possibly conscious decisions of governments against supporting fundamental research in aging for fear of possible socioeconomic consequences—and yet it will be through such work that the vigor and quality of old age will be enhanced and not simply life extended.

Particularly troublesome is the realization that De Beauvoir is "using" old people ideologically:

> It is by concentrating one's efforts upon the fate of the most unfortunate, the worst-used of all, that one can successfully shake a society to its foundations . . . it is the exploitation of the workers, the pulverization of society, and the poverty of a culture confined to the privileged, educated few that leads to this kind of dehumanized old age. And it is this old age that makes it clear that everything has to be reconsidered, recast from the very beginning.

And later she says, "Even more scandalous . . . is the treatment that society inflicts upon the majority of men during their youth and maturity."

She states, correctly and memorably, that old people "are called upon to display serenity; the world asserts that they possess it, and this assertion allows the world to ignore their unhappiness." But, at the same time, she overlooks the growing militancy of old people.

She exaggerates: "The aged do not form a body with any economic strength whatsoever and they have no possible way of enforcing their rights"—this in the face of the unmentioned Townsend pension movement in the United States, the evolution of political organizations for old people, the conduct of major class-action legal cases, and so forth.

De Beauvoir seems especially biased against America, which indeed treats its old disgracefully: Over one-fourth of them are impoverished, about 60 percent ill-housed, and many segregated and ridiculed. She is more sympathetic, for good reason, with Scandinavian countries.

In describing personality characteristics De Beauvoir has not moved beyond Aristotle, the famous "ageist," in attributing avarice to old people. She won't accept Freud's explanation by way of "anal eroticism" although, for no clear reason or data, she believes the questionable Freudian explanation of "castration anxiety" as the cause of man's anxiety about death—surprising indeed for an existentialist.

She sees the memories of the old: "Again and again they turn over a few themes of great emotional value to them [clearly not to her]; and far from growing tired of this perpetual repetition, they return to it with an ever greater pleasure. They escape from the present." Yet studies show that recollection in the old has (might I say?) existential meaning, and so is a resolving factor with respect to one's life and one's death.

De Beauvoir is especially pessimistic about sexuality in old age. Masters and Johnson and others have shown the continuing possibilities of sexual activity into very advanced old age. However, De Beauvoir can't stop remarking upon the "degeneration of the sex glands, which is a consequence of aging," while not observing the success associated with endocrine replacement therapy, prostatic surgery, and so forth. She favors erotic experience, but the author of *The Second Sex* (1) is very negative toward the aging female body. And she says of the old man, "He takes pleasure in erotic literature, licentious works of art, dirty stories, the company of young women and furtive contacts; he indulges in fetishism, sado-masochism, various forms of perversion, and . . . after the age of 80, in voyeurism." She cannot possibly substantiate this hostile generalization from any known studies.

Simone de Beauvoir has lent her enormous reputation to a neglected cause—the shameful treatment of the elderly in much of Western civilization. But the benefit she might have brought by her attention to the tragedy of old age and the prejudices and institutions that sustain it is unfortunately offset by her reinforcement of the multitude of stereotypes about aging and the elderly derived from incomplete—and sometimes defective—scholarship, ideology, elitism, and obvious subjectivity. She literally detests aging and the older person in herself.

She is full of self-pity. There are the usual clichés that she is ostensibly opposing:

"Old people find it very hard to adapt themselves to new situations . . . they resist change."

"For every individual age brings with it a dreaded decline."

"Old age . . . reduces emotion."

De Beauvoir is a product of Western civilization, which aims to control nature. (Science and knowledge are prediction and power.) She stands aside of nature and is anguished by its seeming malevolence. "A Frenchwoman, a writer, a person of 60; this is my situation as I live it," she says unconvincingly. "Old age is something beyond my life, outside it—something of which I cannot have any full inward experience," she states more believably.

"It is old age, rather than death," she says, "that is to be contrasted with life. Old age is life's parody, whereas death transforms life into destiny." This again is literature, perhaps, and her special blend of the personal and the doctrinal.

De Beauvoir is unable to see life as a whole, as a process of nature, with aging beginning at conception and progressing toward death. To her, old age is an insult, extraneous, terrifying, and ugly. It is pardonable to suggest that she wrote about old age out of selfish motivation—to grapple with a subject of anxiety to her—as she tried to deal with her feelings and role as a woman in *The Second Sex* and with the death of her mother in *A Very Easy Death* (2). There is nothing wrong with drawing upon one's own experiences; indeed, the autobiographical approach can be creative. But her purpose here is more an act of espousing political doctrine and of self-centered exorcism, wrapped up in mediocre scholarship.

Should her book become a best seller, I hope that it will be an effective consciousness- and conscience-raising device for the liberation of old people. Some readers may come to see that age, a part of life, need not be the contemporary tragedy that it is.

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Die schizophrenen Geistesstörungen, *by Manfred Bleuler. New York, Intercontinental Medical Book Corp. (U.S. distributor), 1972, 666 pp., DM 128.*

The changing concept of Eugen Bleuler's schizophrenia is defined clearly by the author who, together with his staff, has spent 30 years in the study and treatment of schizophrenic patients and their families.

The importance of primary symptoms has been replaced by an increasing emphasis on autism, which has become a central point in psychopathology and treatment. Eugen Bleuler recognized the therapeutic importance of the correction of autistic withdrawal by "early discharge" from the hospital, and he later supported "prolonged sleep treatment" to permit therapeutic contact with negativistic and withdrawn patients. The other fundamental feature—disorganization (splitting) of the personality—is now formulated in a broad sense and closely related to autism.

The study of the course of the illness gave much evidence that the outcome may be recovery or a satisfactory social adjustment. In the chronic state, a relatively small number of patients present a picture of deterioration, and even then they can usually be reached. A large number show a definite improvement and, on the average, a worsening does not occur after five years. The clinical subgroups change frequently during a patient's life and are less significant than has been assumed.

The diagnosis of schizophrenia must be based on definite psychopathology, and the concept of latent schizophrenia is rejected. A study among relatives (*Uchtenhagen*) revealed findings in the Rorschach test suggestive of a schizophrenic illness, but these findings occurred with similar frequency among the relatives of brain-damaged patients. Borderline and psychoneurotic schizophrenia are not acceptable diagnoses if severe affective or thinking disorders cannot be established.

The effect of the patient's psychopathology on the members of his family has been well observed in the continuous follow-up studies of former inpatients. Children who appeared schizoid improved markedly when taken away from the family. It is of interest to note that continuous high amounts of chlorpromazine were not necessary. Good results were obtained by continuous psychotherapeutic contact that included the family.

Space does not permit me to review many additional interesting findings. Manfred Bleuler's concept of schizophrenia is close to that of American teaching. On the other hand, signs of thinking disorder are evaluated more critically by him, and diagnosis and treatment are guided by changing psychopathological findings and dynamic factors. Manfred Bleuler's growth was influenced by his own experience and his close contact with other countries, including the United States and France. His book should find an important place in psychiatric libraries.

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The Making of a Psychiatrist, *by David S. Viscott, M.D. New York, Arbor House, 1972, 410 pp., $8.95.*

This is at least the second of the "making" books about medical specialty training. (There may be more.) Like its predecessor, *The Making of a Surgeon* (1), it is an autobiographical account of residency training—this time, in psychiatry. Incidentally, it is one of the few Book-of-the-Month Club selections to qualify for review in these august pages.

Professionals in the field approach offerings of this kind with a justifiably high index of suspicion because they are often oversimplified, overglamorized, and highly critical. The author obviously anticipates a mixed reception from his colleagues when he predicts in the introduction that "there will be people who think I am a discredit to the profession and fellow psychiatrists who will race to throw the first stone."

A few stones could be thrown, but basically this is a good book. It is entertaining and highly readable, with a cast of characters most of us will readily recognize—the skillful supervisor, the resident in search of Brownie points, the prosperous practitioner worried about his investments, and many others. But the book is more than that; it is also a perceptive, sympathetic attempt to describe some of the training and experience involved in becoming a psychiatrist.

Every resident in psychiatry—and certainly every director of training—will recognize Dr. Viscott's self-portrait instantly, not so much because such residents are common as because they are not easily forgotten. They are often brash, usually impatient, and rarely impressed by standard operating procedures. They keep asking difficult questions, challenging hallowed rituals, and generally making waves. And they nearly always become extraordinarily sensitive psychiatrists.

One of the book's best chapters is titled simply "Techniques." In it, the author talks about therapeutic omnipotence, the therapist's anonymity, and the patient who falls in love with the doctor. ("Unless you're hard up, I mean *really* hard up, you need this like a hole in the head.") Most of his comments are fair and moderate, and all of them are refreshingly free of psychiatric jargon. One possible exception to the "fair and moderate" label may be his highly negative remarks about orthodox psychoanalysis. Some people will agree with him and some will not, but he does perhaps get in a low blow or two.

Obviously Dr. Viscott will not be everybody's model psychiatrist, nor does he aspire to that. Some readers will object to the fact that he takes the whole business too lightly. When asked why he wanted to enter psychiatry, he replied that it seemed "like fun," and for better or worse, that flavor does linger. Not every suicidal patient comes back from a fifth-story ledge (as Dr. Viscott's did) when the therapist tells her it is against the rules to be out there, and not every patient with Hodgkin's disease turns out to be the kind with a good prognosis. In short, the author is much better at depicting the high points of psychiatric experience—the really meaningful insights, the sense of genuine progress—than he is with the frustrations and disappointments and downright agonies that constitute the other side of the coin. He acknowledges this fact obliquely in the introduction when he observes that "I'm not really so much a wise ass as I sometimes seem."

For the psychiatrist, the ultimate test of this kind of book is whether he would hide it from his patients if he could. Most of us, I think, would not. If Dr. Viscott is less solemn than some of us, he is still very serious indeed about the things that matter. He is less hidebound, but he is not kooky. Most of all, he is honest—not omnipotent, not omniscient, capable of error, but warm, empathic, caring, and "in touch with his own humanity."

The last chapter of the book is titled "Postscript: Some Free Advice to Patients in Psychotherapy." The advice is good, and every patient ought to read it. Most psychiatrists had better do the same thing because they are going to hear echoes of it in the office quite soon.

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JOHN H. HOUCK, M.D.
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The Mental Health Service after Unification: Mental Health in a Unified National Health Service—Report of the Tripartite Committee. *London, Journal Department, British Medical Association (distributor), 1972, 95 pp., 50 p (paper).*

While not all of the problems discussed in this British report have been encountered on our shores, others are beginning to plague us. The tripartite committee that wrote this report was composed of members of the Royal College of Psychiatrists, the Society of Medical Officers of Health, and the British Medical Association. Their mission was to consider all aspects of the reorganization of the mental health service in the light of plans to unify the National Health Service as a whole.

The report holds out strongly the necessity for compulsory liaison between the National Health Service and local authorities at all levels. Failure to accomplish this will result in a waste of resources by one of the bodies concerned. The committee also notes that community care has been a popular slogan for the past decade; indeed, the operation of a system of community care is seen by some enthusiasts as almost a panacea, even as a cure for chronic schizophrenia. The committee too strongly supports the concept of community care both for the mentally ill and the mentally subnormal, but as in our own country, it is found to be rudimentary in some districts.

The task of adequately preparing for it will be immense, but only then—if it is successful—will it be prudent to plan for the curtailment or abolition of existing facilities.

Unfortunately, the British authorities have planned as if community care were already "an accepted service of excellence," and thus consider necessary only extremely low rates of beds for the mentally ill (0.5 per 1,000 population). Official policy even now seems to be "running down mental hospitals" and eventually planning to close them altogether. The committee rightly decries this and believes that, with certain exceptions, no plans to close existing mental hospitals should be made until the corresponding community resources are really adequate and efficient. In the meantime, existing hospitals should be sustained in every way.

The committee quotes with approval a statement made by Sir George Godber in his 1968 annual report to the Department of Health and Social Security: "It is important that a patient be treated with one nursing, medical and social work team structure and not be passed from one to the next as a result of some change in his illness or social or legal status." Indeed, this statement might well have served as a text for the committee in all of its deliberations.

This short book is particularly well written and contains more nuggets than can be mentioned here. The report is timely and exceedingly worthwhile. American psychiatrists would do well to read it, for we soon may be faced with comparable problems.

F.J.B.

The Use of Lithium in Psychiatry, *by Barry Maletzky and Paul H. Blachly. Cleveland, Ohio, CRC Press (Chemical Rubber Co.), 1971, 79 pp., $10.50.*

The story of the use of lithium is a fascinating one. Its history, impressive therapeutic results, and increasing contribution to the understanding of the biochemical aspects of recurrent affective disorders combine to make it so. Drs. Maletzky and Blachly take full advantage of the current interest in lithium to give us a monograph that is outstanding in its balance, applicability, and clarity. Many reviews are cluttered and poorly organized, but the most admirable aspect of this one is that it is pared to the informational bone in a most readable way.

The authors review the history of the use of lithium, placing its current application in the perspective of the hypothesized models of, and suggested causative factors involved in, cyclical affective illness. There is a concise summary of the essential findings in over 20 years of studies, including Kline's and Van der Velde's reviews of the world literature. The use of lithium in various clinical conditions is discussed, and its efficacy is compared to that of other treatment modalities. The comments about lithium's prophylactic usefulness are particularly good, as is the comprehensive section on its toxicity.

The authors' outline of the principles of lithium treatment is clear and direct and includes more than operational *guidelines* as they develop the rationale behind their evaluation and treatment outline. The section devoted to lithium's mode of action is characterized by careful attention to a comparison and synthesis of the various hypotheses and study results. The authors

offer interesting and plausible explanations for certain discrepancies reported by different investigators. They explore lithium's effect upon electrolyte balance as well as its relationship to catecholamine metabolism.

In their summary the authors emphasize the demonstrated usefulness of lithium in treating mania, the convincing evidence of its value in the prophylaxis of recurrent affective disorders, and its remarkable safety when administered under controlled conditions. They also suggest additional opportunities for experimental studies. There is an excellent bibliography (355 references), with an addendum of references not included in the main body of the monograph. The authors comment briefly on these 26 additional articles, thereby bringing the literature reviewed up-to-date as of August 1971.

This book is an excellent source for anyone involved in any aspect of lithium usage.

CHARLES W. BOREN, M.D.
Hartford, Conn.

The Therapeutic Community with Chronic Mental Patients, *by Joshua-O. Maller. New York, S. Karger, 1971, 143 pp., $10.55 (paper).*

In *Special Report: Schizophrenia* (1), prepared in 1971 by Loren R. Mosher and David Feinsilver at the National Institute of Mental Health, the following statement appears:

> Unfortunately their introduction [the phenothiazines] seems to have had one not altogether advantageous result. A tendency now exists to rely on drugs to the exclusion of other approaches. Among discharged schizophrenic patients there is a high readmission rate and poor overall community adjustment.

It is to a segment of the patients so neglected that *The Therapeutic Community with Chronic Mental Patients* addresses itself. Joshua-O. Maller, Superintendent of the Pardessia Government Psychiatric Hospital in Israel, describes a program that has been in effect since 1960. He has gradually come to recognize that their hospital is basically a therapeutic community in which many of the principles described by others have been incorporated and adapted to chronic schizophrenic patients. In most cases, their patients have had at least two years of prior psychiatric hospitalization.

Dr. Maller's deeply human approach is apparent. Although I am not familiar with theological existentialism, the philosophical frame of reference in which Dr. Maller describes his community, it is apparent that many of the principles upon which he operates are similar to those I have learned from my own work with chronic schizophrenic patients.

Some of the important principles he discusses include:

1. An active therapeutic approach. He states, "It must not be forgotten that unlike neurotics or psychopaths, in chronics an initial authoritative function must be substituted for the damaged volitional function of the patient."
2. Teaching the entire hospital staff understanding and respect for the chronic mental patient.
3. The creation of an atmosphere of progressive polyvalent communication between patient, staff, family, employer, and other community members.
4. The creation of "the integrated therapeutic community" through establishment of ties to the social community outside. Ideally, the transition from within the hospital to outside it are so gradual and smooth that they are almost imperceptible.
5. A readiness of the institution to readmit former patients and provide assurance of the availability of the hospital's therapeutic community when it is needed.
6. Clear emphasis on the development of a *community* as opposed to a *collective.* To quote Maller:

> Insofar as these meetings respect the integrity and independence of every participant and do not require him to give up certain essentials of existence (freedom, decision-making, self-responsibility) . . . "we" situations are created and the community is formed. Conversely, the collective is based on the principle of collection, of assembling that which is similar and eliminating that which differs.

The statistical tables included show that during the period of February 1, 1960, to December 31, 1966, 457 patients had been admitted to the Pardessia hospital. Of that number, 35 percent had been transferred to locked hospitals and another six percent to custodial hospitals. Only 15 percent had been discharged to their homes. Three percent lived in the hospital but worked outside, and 31 percent were in industrial therapy or occupational therapy within the hospital. Although the treatment seems prolonged and the success rate disappointing, the extremely poor prognosis of the patients treated must be considered.

For me, the extensive theoretical discussion of existential philosophy made difficult reading. Missing were specific examples illustrating the transactions among staff members, patients, and families. Also of value would have been more information regarding the techniques of staff training. I felt, however, that the book had added to the depth of my understanding of the phenomenon with which I had already become familiar in treating chronic schizophrenic patients in a therapeutic community. The reader with no experience in the field might have difficulty grasping the significance of many of the concepts the author elaborates. It is certain, however, that a visit to Pardessia would be enriching.

REFERENCE

1. Mosher LR, Feinsilver D: Special Report: Schizophrenia. NIMH Center for Studies of Schizophrenia, publication no (HSM) 72-9007. Washington, DC, US Government Printing Office, 1971

JACK DURELL, M.D.
Washington, D.C.

Homosexuality and Pseudohomosexuality, *by Lionel Ovesey, M.D. New York, Science House, 1969, 157 pp., $8.95.*

This book is a compilation of the author's papers on homosexuality from 1954 through 1963. Of the seven articles, one was co-authored with Willard Gaylin and two with Dr. Gaylin and Herbert Hendin.

The topics covered include Ovesey's view of homosexual conflict: the concept of pseudohomosexual anxiety; the relationship among paranoia, paranoid mechanisms, and pseudohomosexuality; masculine aspirations in women; and the psychotherapy of male homosexuality with comments on prognosis, selection of patients, and therapeutic technique. The last chapter, "Case Studies of Male Homosexuality," describes the treatment of three patients with follow-ups of five or more years. The volume is a significant contribution to our understanding of homosexuality in terms of modern clinical attitudes. Ovesey, among others, has helped to rescue it from the limbo of untreatable conditions (1–3).

Notwithstanding the title, I found that the concept of pseudohomosexuality merits far less emphasis than it has been accorded and constitutes only a minor aspect of Ovesey's work. For example, he states that a heterosexual patient may wish for homosexual gratification but experiences no anticipatory erotic feelings. If such a patient combines this wish and a lack of erotic feelings together with the two nonsexual motivations of dependency and power, he may achieve satisfaction of his dependency and power needs in *fantasy*. This man is said to be suffering from pseudohomosexuality although, at the same time, we are told that he is heterosexual. If he then becomes anxious about this, as revealed in dream material or conscious fantasies, he develops pseudohomosexual anxiety.

Many readers of this volume may easily overlook the fact that Ovesey also includes in this situation a man with the same constellation of factors who then actually engages in homosexual relations to the point of orgasm. Ovesey states that the man had no sexual pleasure prior to the homosexual act, but apparently then does experience sexual pleasure during relations with a same-sex partner. All this he designates as pseudohomosexuality and the anxiety secondary to it as pseudohomosexual anxiety. Evidently he bases his conclusion on the fact that there are no erotic feelings preceding the actual engagement in the homosexual act if, indeed, it does take place, and that the patient is simply using his genitals in the service of other motivations.

It is well known, as Ovesey acknowledges, that homosexual patients, along with their desire for orgastic satisfaction, also seek to gratify their unconscious dependency and power needs when they engage in overt homosexual behavior. That individuals are co-motivated, one motivation rising above the other, and that there is a hierarchical organization of motivations, now one in the ascendancy, now another, was well known to Freud. My own research yielded the finding that the underlying motivation behind *obligatory* homosexuality (i.e., homosexuality arising from inner necessity and a primary feminine identification developed in the preoedipal phase) is ego survival—acquistion of masculinity, albeit temporary, through incorporation of the penis and body of the partner and protection from feelings of weakness and the fear of engulfment at the hands of the mother. Orgastic satisfaction is a concomitant motivation along with gratification of dependency needs and triumphing over the "stronger" male.

Ovesey unfortunately has not taken into account the new research into the classification of homosexuality, which distinguishes between obligatory homosexuality (preoedipal causation) and oedipal homosexuality. The latter form is the manifestation of the negative phase of the oedipal conflict. In these cases the homosexual symptom is ego-alien and therefore there is an absence of conscious erotic excitement. It will usually remain at the level of unconscious thoughts, dreams, and fantasies. Unlike homosexuality derived from the preoedipal phase, it is not a disguised, unconsciously acceptable representation of a deeper conflict (Hanns Sachs's mechanism). When the symptom in a case of oedipal (negative phase) conflict threatens to break into awareness as an erotic feeling, anxiety may develop due to fear of conscience, fear of social censure, and the potential loss of self-esteem. However, under certain conditions, such as defiant rage overriding the restraining mechanism of conscience, periods of intense depression secondary to loss, and the resultant needs for love, admiration, and strength from a person of the same sex, homosexual acts may take place. Such acts, however, do not achieve the magical symbolic restitution as with the preoedipal type, nor is it as inflexible or stereotyped.

Thus Ovesey's pseudohomosexuality is, in my opinion, unconsciously determined *oedipal* homosexuality. This condition, which is often encountered in practice, does not warrant a specialized diagnostic term, thus casting doubt on its correct evaluation as a form of homosexuality.

Apart from these considerations, the author has provided us with a useful publication. Ovesey is to be commended particularly on the manner in which he carefully takes the reader through the difficult periods of therapy: first attempts at heterosexual functioning, the reasons for the interdiction or proscribing of homosexual contacts, dealing with the patient's fear of impotence with women, guilt as resistance, encouragement techniques, and practical advice as to management.

REFERENCES

1. Socarides CW: The Overt Homosexual. New York, Grune & Stratton, 1968
2. Hatterer LJ: Changing Homosexuality in the Male. New York, McGraw-Hill Book Co, 1971
3. Bieber I, Dain HJ, Dince PR, et al: Homosexuality: A Psychoanalytic Study. New York, Basic Books, 1962

CHARLES W. SOCARIDES, M.D.
New York, N.Y.

The Physiology of Aggression and Defeat, *edited by Basil E. Eleftheriou and John Paul Scott. New York, Plenum Press, 1971, 305 pp., $13.50.*

This book consists of the proceedings of a special symposium on the Physiology of Aggression and Defeat held at the December 1968 meeting of the Association for the Advancement of Science in Dallas, Tex.

In recent years there has been much emphasis in the psychiatric and other behavioral literature on the social-psychological determinants of aggression and its effects on the "victim," that is, the vanquished or defeated. Some of this literature implies that aggressive behavior with socially important consequences can be adequately understood by taking account only of social, economic, cultural, and other "extraorganismic" variables. Of course, this is not the case. "Intraorganismic" or biological variables are an essential part of the equation and contribute much to the total variance. This book is largely concerned with some of these biological factors, a knowledge of which is essential for understanding aggression as a behavioral phenomenon. This in turn offers the potential for its direction and control in the interest of the commonweal.

The symposium itself contains interesting and valuable contributions, but as a collection the papers do not fit together well. There are some definitional and conceptual problems that require clarification before one can think about so general a term as "aggression." Some clarification is provided in the excellent chapter by K.E. Moyer on physiological models of aggressive behavior, but it alone is not enough. The eight contributions cover an incredibly wide range of topics that bear on the issue of aggression, but in different ways. For example, the impressive research reported by R. Plotnik, D. Mir, and J.M.R. Delgado, in which agonistic behavior was elicited and studied in unrestrained rhesus monkeys by direct electrical stimulation of specific brain sites, is directed at the neurophysiologic *determinants* of behavior. In contrast, the interesting study by P.G. Bourne on altered adrenal function in military combatants in Viet Nam is concerned with adrenocortical steroid *correlates* of aggressiveness.

Other contributions have to do with the effects of sex hormones on the fighting propensities of mice, brain biogenic amine correlates of isolation-induced aggressiveness, and differ-

ential changes in brain macromolecules (e.g., ribonucleic acid) following successful fighting versus defeat. J.P. Scott provides a brief but useful theoretical discussion on the origins and causes of fighting from a genetic, physiologic, and ethologic perspective. This kind of cafeteria sampling does not constitute a well-rounded meal. On the other hand, it should not produce indigestion, since each of the papers is of value in its own right.

It is unfortunate that almost three years elapsed between the symposium and its publication. Some of the research is in rapidly developing areas, and such a delay makes some of the studies a little out-of-date.

In all, this is a useful book by virtue of the caliber of the individual contributions.

JOHN PAUL BRADY, M.D.
Philadelphia, Pa.

Current Psychiatric Therapies, vol. 11, *edited by Jules H. Masserman, M.D. New York, Grune & Stratton, 1971, 213 pp., $14.*

As the editor points out in the preface, this first volume in the second decade of this well-known series sets out to present a wider range of "more comprehensive techniques" in treatment procedures for a series of clinical problems. As might be expected with such an undertaking, the various chapters are not equal in format, style, or even importance, but there are useful hints and suggestions throughout. If there were no other value in the volume than the admonition that the therapist seek therapeutic possibilities outside the standard modalities, it would still be very worthwhile.

The use of computers in the treatment of nonspeaking autistic children, as described by Colby and Smith, is intriguing and may offer some new possibilities in this admittedly discouraging field. Brandes' chapter on the adolescent gets off to a cumbersome start because of the many numerical references (his bibliography is impressive), but he has some practical suggestions, not the least of which is that the therapist must be himself and not try to woo acceptance from his young patients by dressing and talking as they do. Sarrel is equally practical in his management of the difficulties of unwed teen-aged mothers.

In the section on adult techniques, I was a little disappointed that Marcus' chapter on "Gestalt Therapy" and Laqueur's on "Systems Therapy" were not more explicit, for these approaches with a here-and-now flavor seem most appealing for the present-day philosophy. Denmark's brief discussion of the difficulties of psychotherapy with deaf patients deserves careful and thoughtful attention, for there are undoubtedly many similar situations demanding special attention and skills from the therapist.

Huston's chapter on "Treatment of Depressions" covers a great deal of material, but surprisingly does not mention sedatives as preparatory medication for electrotherapy or Indoklon as a possible substitute. Also, lithium carbonate was not suggested as a possible prophylactic medication, although it is certainly true that it is less successful in preventing recurrent depressive episodes than in doing the same for manic recurrences. Shader's chapter on "Drugs and Anxiety" is excellent in its specificity; his error in listing Librium as a meprobamate is obvious. Equally practical are the two following chapters on drugs by Brady and by DiMascio and Shader.

It is worth emphasizing that some symptoms developed by older people may be due to cerebral hypoxia, as suggested by Jacobs and associates. The improvement demonstrated by some of these patients when they are exposed to high concentrations of oxygen should remind us of the possibility that when older persons change living locations from lower to higher altitudes, some difficulties in functioning may occur.

The chapters in the section on marital therapies by Grunebaum and associates, Hollender, and Hansell and associates are all practical guides to choices of therapy for identification of problems and methods of coping with these various difficulties. Hollender's advice that sometimes "no therapy" is the procedure of choice is an often-neglected but very valuable observation.

While mandatory therapy has not often been viewed with enthusiasm, Mathis and Cullens have found it useful in the group treatment of exhibitionists. Seeman advocates a broad application of various treatment modalities—art, music, dance—for his group activities, and these are used in imaginative ways. Grosz reports on the use of ex-patients in the organization called Recovery, Inc.

In the section on community psychiatry, Mike Gorman zeroes in on the delivery of mental health services and in his own inimitable way points out the major distressing defects in health coverage and the absolute necessity of providing some type of national health insurance if we are not to compound the present chaos. His presentation, characteristically, is informed, articulate, and passionate.

A part of this health delivery problem is covered in the section on the various modifications of institutional therapies. Varieties of partial hospitalization are discussed by Feder, Astrachan and colleagues, and Feirstein and associates. Folsom tabulates the importance of staff attitudes in his chapter on "Attitude Therapy in a Hospital Setting."

The volume ends on an international flavor with De Smit's outline description of the crisis center in Amsterdam and with Masserman's outline of the activities of the International Association of Social Psychiatry. In this first issue of the second decade of this series, the new format does provide a good overview of new developments in several interesting and exciting areas, as well as updating some more traditional ones.

C.H. HARDIN BRANCH, M.D.
Santa Barbara, Calif.

Annual Progress in Child Psychiatry and Child Development: 1971, *edited by Stella Chess, M.D., and Alexander Thomas, M.D. New York, Brunner/Mazel, 1971, 607 pp., $15.*

This is the fourth volume in a series that is already having an appreciable impact on the field of clinical and developmental child behavior. Not only is the series establishing itself with busy clinicians as a means of keeping abreast of new advances, but it is also proving itself to be something of a standard setter. Having one's work selected for inclusion amounts to an accolade. Since my work was not included in the year's "outstanding contributions," I can be objective about the book's merits, which are conspicuous.

The book is well edited and attractively printed and in time, along with many others, should make a handsome appearance on the bookshelf. The most striking virtue of the series thus far is the reliability of its appearance each year, which goes to show that, as far as editors are concerned, the best articles are completed articles. The editors are spared all struggles with procrastinators, having only to make their choice and add a few kind words to encourage the reader.

A volume fabricated in this way tends to reflect editorial perspective rather than the current state of the art. If the reader does not see eye to eye with the editor, then the contents, as a

whole, are likely to leave him less than enthralled. The critical factor in general acceptance is whether editors can rise above their own particular frame of reference and search for excellence wherever they can find it. The editors in this case are well known for their "constitutional" approach, so it is not surprising to note that this is fairly well represented in the anthology. One would not, for that matter, expect to find many psychodynamic articles or articles dealing with intrapsychic life, and this is also the case.

Nevertheless, the selection is much wider than in most collections, ranging through cognitive studies, language and learning, social disadvantage and poverty, mental retardation, institutionalization, treatment, and the "now" syndromes of blacks' problems, drugs, and teen-age pregnancy. Selection has also been flexible enough to include the evaluation of psychoanalytic psychotherapy for patients generally excluded from such treatment, indicating that the editors have based their selection, above all, on the evidence of good empirical research. However, even such admirable standards of excellence do not by themselves preclude the admission of contributions that are dull and pedestrian litter in context or presentation, and a certain number of these have crept in (presumably under some disguise), but the good things predominate and compensate for the less rewarding ones.

The ultimate worth of a compendium of this kind can be roughly judged by the memorabilia that can be carried away after a quick reading, and in this respect, this book, like its predecessors, comes out well. We can remember, for example, that institutions need to be evaluated along with their patients, divorce is a family problem, depressed children have depressed mothers, childhood psychosis has a prevalence rate that is one-hundredth that of mental retardation, intelligence is highly sensitive to environment, retarded children may also be deviant, and child neglect is a social as well as an emotional problem. The clinician may know all these things by intuition, but here he has them buttressed with good data.

Where the empirical point of view shows itself most is in the absence of theory, and those interested in contemporary ideas in psychiatry will find themselves relatively disappointed and deprived in this respect. Perhaps theory does not make annual progress!

E. JAMES ANTHONY, M.D.
St. Louis, Mo.

This Month's Reviewers

ROBERT N. BUTLER, M.D., is a research psychiatrist and gerontologist with the Washington School of Psychiatry, Washington, D.C.

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Books Received

This listing acknowledges the receipt of recent books. Books of particular interest to the readers of this journal will be reviewed as space permits, and copies of the reviews will be sent to the publishers. Books cannot be returned to the publishers.

Preventing Drug Abuse: A Book of Readings, *collected and edited by Donald E. Barnes and Louisa Messolonghites. New York, Holt, Rinehart and Winston, 1972, 109 pp., no price listed.*

Addiction: An Artificially Induced Drive, *by Nils Bejerot, M.D. Springfield, Ill., Charles C Thomas, 1972, 73 pp., $7.50.*

Behavior Modification in Child, School, and Family Mental Health: An Annotated Bibliography, *by Daniel G. Brown. Champaign, Ill., Research Press Co., 1972, 105 pp., $2 (paper).*

Psycholinguistics: Selected Papers *(1970), by Roger Brown. New York, Free Press (Macmillan Co.), 1972, 376 pp., $3.95 (paper).*

The Teachings of Don Juan: A Yaqui Way of Knowledge *(1968), by Carlos Castaneda. Berkeley, University of California Press, 1973, 196 pp., $2.45 (paper).*

Cruel, Poor and Brutal Nations: The Assessment of Mental Health in an Australian Community by Short-Stay Psychiatric Field Team Methods, *by John Cawte, M.D., Ph.D. Honolulu, University Press of Hawaii, 1972, 177 pp., $9.50.*

Annual Progress in Child Psychiatry and Child Development: 1972, *edited by Stella Chess, M.D., and Alexander Thomas, M.D. New York, Brunner/Mazel, 1972, 732 pp., $15.*

Implementing Behavioral Programs for Schools and Clinics. The Proceedings of the Third Banff International Conference on Behavior Modification, April, 1971, *edited by Frank W. Clark, David R. Evans, and Leo A. Hamerlynck. Champaign, Ill., Research Press Co., 1972, 201 pp., $4 (paper).*

Religious Experience: Its Nature and Function in the Human Psyche, *by Walter Houston Clark, Ph.D., H. Newton Malony, Ph.D., James Daane, Th.D., and Alan R. Tippett, Ph.D. Springfield, Ill., Charles C Thomas, 1972, 145 pp., $7.95.*

Philosophy of Medicine and Science: Problems and Perspectives, *compiled by the Department of Philosophy of Medicine and Science. New Delhi, Institute of History of Medicine and Medical Research, no date listed, 289 pp., no price listed (paper).*

The Double Brain, *by Stuart Dimond, Ph.D. Baltimore, Williams & Wilkins Co. (U.S. agents), 1972, 225 pp., $14.*

Mind One, *by Mike Dolinsky. New York, Dell Publishing Co., 1972, 240 pp., $1.25 (paper).*

The Female Orgasm: Psychology, Physiology, Fantasy, *by Seymour Fisher. New York, Basic Books, 1973, 521 pp., $15.*

Practical Problems of a Private Psychotherapy Practice, *compiled and edited by George D. Goldman, Ph.D., and George Stricker, Ph.D. Springfield, Ill., Charles C Thomas, 1972, 279 pp., $11.50.*

The Theory and Practice of Psychotherapy with Specific Disorders, *edited by Max Hammer, Ph.D. Springfield, Ill., Charles C Thomas, 1972, 423 pp., $16.75.*

Human Senses in Action, *by Roland Harper, Ph.D. Baltimore, Williams & Wilkins Co. (U.S. agents), 1972, 351 pp., $15.25.*

I'm OK—You're OK: A Practical Guide to Transactional Analysis, *by Thomas A. Harris, M.D. New York, Harper & Row, 1969, 267 pp., $5.95.*

Abortion in the Clinic and Office Setting, *edited by Thomas M. Hart, M.D. San Francisco, Society for Humane Abortion, 1972, 105 pp., $2.50 (paper).*

Death as a Fact of Life, *by David Hendin, M.A. New York, W.W. Norton & Co., 1973, 243 pp., $7.50.*

Children in "The Nursery School" *(1928), by Harriet M. Johnson. New York, Agathon Press, 1973, 322 pp., $7.50.*

A History of the Mental Health Services, *by Kathleen Jones. Boston, Routledge & Kegan Paul, 1972, 403 pp., $15.*

Twelve to Sixteen: Early Adolescence, *edited by Jerome Kagan and Robert Coles. New York, W.W. Norton & Co., 1973, 351 pp., $15.*

Man Controlled: Readings in the Psychology of Behavior Control, *edited by Marvin Karlins and Lewis M. Andrews. New York, Free Press (Macmillan Co.), 1972, 277 pp., no price listed.*

Facing Death, *by Robert E. Kavanaugh. Los Angeles, Nash Publishing, 1972, 226 pp., $7.95.*

Healing and Christianity, *by Morton T. Kelsey. New York, Harper & Row, 1973, 391 pp., $8.95.*

Curanderismo: Mexican-American Folk Psychiatry *(1968), by Ari Kiev, M.D. New York, Free Press (Macmillan Co.), 1972, 200 pp., $2.95 (paper).*

Stress and Distress in Response to Psychosocial Stimuli, *edited by Lennart Levi. Elmsford, N.Y., Pergamon Press, 1973, 160 pp., $10.50 (paper).*

Changing Hospital Environments for Children, *by Roslyn Lind-*

heim, Helen H. Glaser, and Christie Coffin. Cambridge, Mass., Harvard University Press, 1972, 202 pp., $10.

The Love Doctors, *by Patrick M. McGrady, Jr. New York, Macmillan Co., 1972, 402 pp., $7.95.*

A Selective Guide to Materials for Mental Health and Family Life Education, *compiled by the Mental Health Materials Center. Northfield, Ill., Perennial Education, 1973, 842 pp., no price listed (paper).*

Recovery with Aphasia: The Aftermath of My Stroke, *by C. Scott Moss. Urbana, University of Illinois Press, 1973, 199 pp., $7.50.*

Marihuana—Deceptive Weed, *by Gabriel G. Nahas, O.B.E., M.D., Ph.D. New York, Raven Press, 1972, 326 pp., $12.50.*

La Drogue, *by Yves Pélicier and Guy Thuillier. Paris, Presses Universitaires de France, 1972, 127 pp., no price listed (paper).*

When We Deal with Children: Selected Writings *(1966), by Fritz Redl. New York, Free Press (Macmillan Co.), 1972, 494 pp., $3.95 (paper).*

Sexual Behaviors: Social, Clinical, and Legal Aspects, *edited by H.L.P. Resnik, M.D., and Marvin E. Wolfgang, Ph.D. Boston, Little, Brown and Co., 1972, 428 pp., $15.*

Child Psychiatry in the Soviet Union: Preliminary Observations, *by Nancy Rollins, M.D. Cambridge, Mass., Harvard University Press, 1972, 285 pp., $12.95.*

Therapeutic Communication *(1961), by Jurgen Ruesch, M.D. New York, W.W. Norton & Co., 1973, 468 pp., $4.95 (paper).*

What Is Hypnosis: Studies in Conditioning Including Three Techniques of Autohypnosis, 4th revised edition, *by Andrew Salter. New York, Farrar, Straus and Giroux, 1973, 104 pp., $6.95.*

Soul Murder: Persecution in the Family, *by Morton Schatzman. New York, Random House, 1973, 186 pp., $6.95.*

Sound and Sign: Childhood Deafness and Mental Health, *by Hilde S. Schlesinger, M.D., and Kathryn P. Meadow, Ph.D. Berkeley, University of California Press, 1973, 257 pp., $10.*

Progress in Neurology and Psychiatry: An Annual Review, vol. XXVII, *edited by E.A. Spiegel, M.D. New York, Grune & Stratton, 1972, 354 pp., $26.50.*

The LSD Controversy: An Overview, *by Maurice S. Tarshis, Ph.D. Springfield, Ill., Charles C Thomas, 1972, 74 pp., $6.50.*

Understanding Through Communication: Structured Experiments in Self-Exploration, *by Lois Timmins, Ed.D. Springfield, Ill., Charles C Thomas, 1972, 303 pp., $11.75.*

The Borderline Patient, *by Arlene Robbins Wolberg. New York, Intercontinental Medical Book Corp., 1973, 276 pp., $13.75.*

The Mechanisms of Conditioned Behavior, *by Wanda Wyrwicka, Ph.D. Springfield, Ill., Charles C Thomas, 1972, 172 pp., $11.50.*

Contact: The First Four Minutes, *by Leonard Zunin, M.D., with Natalie Zunin. Los Angeles, Nash Publishing, 1972, 250 pp., $7.95.*

OFFICIAL ACTIONS

1973 Annual Meeting: Preliminary Program

Following is the preliminary program and other information related to the APA annual meeting, which will be held in Honolulu, Hawaii, May 7–11, 1973. The information here is what was available as of mid-January 1973; it is subject to additions, deletions, and other changes. Included are Registration and Related Information, the Scientific Program, and an Index of Participants. An official booklet containing additional information such as the names of officers of sessions and of discussants, as well as locations, will be distributed in Honolulu at the time of registration.

Registration and Related Information

REGISTRATION

All registration will take place on the mezzanine floor of the Sheraton Waikiki Hotel. The registration desk will be open:

Sunday, May 6—1:00 to 5:00 p.m.

Monday through Thursday, May 7–10—8:00 a.m. to 5:00 p.m.

Friday, May 11—8:00 a.m. to 2:30 p.m.

A registration fee of $10 per day, or $40 for the five days, is required from all nonmembers with the exception of: 1) formally invited participants who are presenting papers or who are session officers, 2) discussants, 3) participants on morning and evening panels, 4) their immediate families, and 5) the immediate families of members of APA. Associate members, members-in-training, and their spouses and immediate families are also exempt from paying registration fees. The fee covers admission to the sessions and includes a badge and a copy of the official program. Badges are required for all sessions (including the opening session) and for the exhibit area. However, a badge does not cover admission to the business session of the Association, which is open only to members.

A $10 registration fee for the five days is required of visitors living outside the United States and Canada and of military personnel on active duty.

A $5 registration fee for the five days is required of the spouses and dependents of all nonmember registrants.

A $5 registration fee for the five days is required of medical students, interns, residents, chaplains, nursing students, students in the mental health professions, and their spouses. Students must present a letter from their school or training facility certifying their status.

The *Scientific Proceedings in Summary Form* for the 1973 annual meeting will be available throughout the week in the registration area at the Sheraton Waikiki Hotel and in the Ballroom Foyer of the Hilton Hawaiian Village.

INFORMATION AND MESSAGE CENTER

The information and message center will be located on the mezzanine floor of the Sheraton Waikiki Hotel and will be manned:

Saturday, May 5—1:00 to 5:00 p.m.

Sunday, May 6—9:00 a.m. to 5:00 p.m.

Monday through Thursday, May 7–10—8:00 a.m. to 5:15 p.m.

Friday, May 11—8:30 a.m. to 2:30 p.m.

Self-service message racks will be available for pickup, deposit, and exchange of messages at all times, even when the message center is closed. Extremely urgent messages will receive the personal attention of APA staff members. All registrants are requested to check the message center periodically.

KEY LOCATIONS

The APA Convention Office will be located in the Ewa Room on the mezzanine floor of the Sheraton Waikiki Hotel. All other APA staff offices will be on the fourth floor of the Sheraton Waikiki.

APA Staff Office	425
Arrangements	428
Information Center	Mezzanine, Sheraton Waikiki
Journal	423
Ladies Hospitality	Niihau Room, mezzanine floor, Sheraton Waikiki
Press Room	426, 427
Program	424

JOURNAL OFFICE

The office of *The American Journal of Psychiatry* will be in

Room 423 (fourth floor) of the Sheraton Waikiki Hotel. The office will be open from 8:00 a.m. to 5:30 p.m., Monday through Thursday, and from 9:00 a.m. to 6:00 p.m. on Friday. Members of the *Journal* staff will be available to discuss any questions that authors who are presenting papers at the meeting may have. They particularly welcome the opportunity to confer with authors about tables and figures to be included in the papers.

It is the policy of the *Journal* to publish only original material that has not been published elsewhere in any form and that is not being considered for publication elsewhere. "Publication" includes recording on videotape or audiotape or appearance in printed form. Specifically with regard to the annual meeting, this policy applies to any material, including new research papers and morning and evening panels, that the authors wish to have considered for publication in the *Journal.*

Authors of numbered papers are reminded that all such papers are the property of the *Journal.* Permission must be secured from the Editor, Francis J. Braceland, M.D., before a paper may be considered for publication elsewhere.

PAPER NUMBERS

Paper numbers are assigned for your convenience in using this preliminary program. These numbers are subject to change. Final numbers will appear in the official APA Program that will be distributed at the annual meeting.

FIRST-AID ROOM

The message and information center of APA will have a list of cooperating physicians. For night emergencies cooperating physicians may be contacted through your hotel switchboard.

MORNING AND EVENING PANELS

Morning panels will be held on Wednesday, May 9, and on Friday, May 11, at 7:00 a.m. Their location will be shown in the official APA Program. Breakfast may be obtained in regular hotel facilities.

Evening panels will be held on Tuesday, May 8, at 7:00 p.m., and on Thursday, May 10, at 5:30 p.m. Their locations will be shown in the official APA Program.

CONTINUING EDUCATION (VIDEOTAPE SPECIAL SESSIONS)

Continuing education sessions are scheduled throughout the week and are presented through the courtesy of Roche Laboratories. All TV sessions will be held in the Dome of the Hilton Hawaiian Village.

FILMS

Films will be shown throughout the week in the Dome of the Hilton Hawaiian Village. A special feature will be shown on Wednesday, May 9, at 2:00 p.m.

EXHIBITS

Technical exhibits will be located on the mezzanine floor of the Sheraton Waikiki Hotel and will be open from Sunday, May 6, at 1:00 p.m., through Thursday, May 10.

Institutional and scientific exhibits will be located in the Tapestry Lounge of the Hilton Hawaiian Village and will be open Monday, May 7, through Thursday, May 10.

ANNUAL BANQUET AND DANCE

The annual banquet and dance will be held on Wednesday, May 9, at 7:30 p.m. in the Coral Ballroom of the Hilton Hawaiian Village. A cocktail party, beginning at 6:30 p.m., will be held in the Roof Garden, which is adjacent to the Coral Ballroom. The cocktail party is included in the price of a banquet ticket.

Tickets may be purchased in advance from Trade Wind Tours, APA Coordinator, P.O. Box 2198, Honolulu, Hawaii 96805, or in the registration area up to 12 noon on Tuesday, May 8.

MONDAY, MAY 7 8:00 A.M.

Official Opening of the 126th Annual Meeting of the American Psychiatric Association

Call to Order: *Perry C. Talkington, M.D. (LF),* President*

Hawaiian Blessing: *The Reverend Abraham K. Akaka, Kawaiahoa Church, Honolulu, Hawaii*
Selections by the Kamehameha High School Boys and Girls Glee Clubs

Official Greetings: *The Honorable John A. Burns, Governor of the State of Hawaii*

Introduction of Visiting Dignitaries

Introduction of Chairmen of the Program and Arrangements Committees:
Melvin Sabshin, M.D. (F), George Schnack, M.D. (F)

1 Presidential Address
Perry C. Talkington, M.D. (LF)

Response of the President-Elect
Alfred E. Freedman, M.D. (F)

Benediction: *The Reverend Yoshiaki Fujitani, Honpa Hon Hongwanji Mission, Honolulu, Hawaii*

Reception

* The following abbreviations refer to membership in the American Psychiatric Association:

(A)	Associate	(DM)	Distinguished Member	(I)	Invitee	(M)	Member
(CF)	Corresponding Fellow	(F)	Fellow	(LF)	Life Fellow	(MT)	Member-in-Training
(DF)	Distinguished Fellow	(HF)	Honorary Fellow	(LM)	Life Member		

MONDAY, MAY 7 12:00 P.M.

Session I: Adolescence

2 Psychiatric Hospitalization of Adolescents: A Follow-Up Study
Julian Kivowitz, M.D. (M), Judith Forgotson, M.D. (M), Gerald Goldstein (I), Fred Gottlieb, M.D. (F)

3 The Effect of Childhood Bereavement in Adolescence
Roslyn Seligman, M.D. (F), Goldine Gleser, Ph.D. (I), Joseph Rauh, M.D. (I), Leonard Harris, M.D. (MT)

4 Normal Family Regression at Adolescence
Kent Ravenscroft, Jr., M.D. (M)

5 Prediction of Murder by Adolescents
Derek Miller, M.D. (F), John G. Looney, M.D. (MT)

6 Delinquency and Family Disciplinary Configurations
Melvin Singer, M.D. (M)

Session II: Forensic Psychiatry, Criminal Behavior, and Prisons

7 An Evaluation of Psychotherapy in a Court Clinic
David Lelos, M.A. (I), A. Louis McGarry, M.D. (F), Barbara Popken (I)

8 Psychiatry and the Family Law System
John M. Suarez, M.D. (F), Jan Hunt, J.D. (I)

9 Factors Influencing Criminal Behavior in Newark
Harold S. Feldman, M.D. (M), Robert G. Jarmon (I)

10 Ellsworth House: A Community Alternative to Jail
H. Richard Lamb, M.D. (M)

11 Psychiatric Care in an Overcrowded Prison System
Edward Kaufman, M.D. (M)

12 Jury Selection: Pentagon Papers Trial
Roger L. Gould, M.D. (F), Renee Gould, M.S.C.R.P. (I)

Session III: Peer Evaluation, Certification, and Self-Assessment

13 Evaluation of the Psychiatrist's Performance
Monte J. Meldman, M.D. (F), Rudolf G. Novick, M.D. (LF), Morris B. Squire (I)

14 A One-and-a-Half-Year Experience with Peer Utilization Review
Donald E. Newman, M.D. (F), Herbert S. Goldstein, M.D. (M), Vard Kazanjian, Ph.D. (I)

15 Private Peer Review of Publicly Funded Programs
Allan Levy, M.D. (F)

16 Resident Peer Supervision of Psychotherapy
Daniel K. Winstead, M.D. (MT), Jay S. Bonovitz, M.D. (MT), Melvin S. Gale, M.D. (MT), J. William Evans, M.D. (MT)

17 Board Certification in Psychiatry: New Developments
Stuart M. Finch, M.D. (F), John F. McDermott, Jr., M.D., Christine McGuire, M.A. (I)

18 Results of the 1972 Self-Assessment Program
Hugh T. Carmichael, M.D. (LF), Bryce Templeton, M.D. (M)

Session IV: Psychobiology I

19 An Overview of Immunological Research in Schizophrenia
Joseph H. Autry III, M.D. (MT)

20 CSF Amine Metabolites and Therapies of Depression
Frederick K. Goodwin, M.D. (M), Robert M. Post, M.D. (MT), Dennis L. Murphy, M.D. (M)

21 Thyrotropin-Releasing Hormone in Depression
Arthur J. Prange, Jr., M.D. (F), Ian C. Wilson, M.B. (I), Patricia P. Lara, M.D. (A), Lacoe B. Alltop (I)

22 Effect of Motor Activity on Urinary MHPG in Man
Michael H. Ebert, M.D. (I), Robert M. Post, M.D. (MT), Frederick K. Goodwin, M.D. (M)

23 Muscle Abnormalities in Psychotic Patients
Herbert Y. Meltzer, M.D. (A), Marilyn L. Maas, Ph.D. (I)

Session V: Mental Health and Psychopolitics

24 The Numbers Myth in Community Mental Health
Donald A. Schwartz, M.D. (F), Louise D. Epps, Ph.D. (I)

25 Models in Search of Community Mental Health Programs
Racquel E. Cohen, M.D. (F)

26 Human Resources: A New Direction in Mental Health
Peter G. Bourne, M.D. (M)

27 Great Psychiatric Empires
E. Fuller Torrey, M.D. (M), Robert L. Taylor, M.D. (M)

28 Psychopolitics: Games Politicians Play
Darold A. Treffert, M.D. (F)

29 Emergency Commitment: A Transcultural Study
Michael A. Peszke, M.D. (M), Ronald Wintrob, M.D. (M)

Session VI: Ego Development and Cultural Differences (Joint Panel with the American Psychoanalytic Association)

30 Body, Mind, and Culture Dialectics in Ego Development

Charles A. Pinderhughes, M.D. (M)

31 Socialization, Conservatism, and Personality Development Among Athabaskans
L. Bryce Boyer, M.D. (F), Ruth M. Boyer, Ph.D. (I)

32 Ego Functions and Sociocultural Evolution
Robert A. LeVine, Ph.D. (I)

Session VII: National Commission on Marijuana and Drug Abuse

33 A National Program to Combat Drug Abuse
Dana L. Farnsworth, M.D. (F)

34 Half a Loaf (A Critique of "Marijuana—A Signal of Misunderstanding")
Lester Grinspoon, M.D. (F)

35 Social-Cultural Aspects of Repetitive Drug Use
Louis P. Bozzetti, Jr., M.D. (M)

36 Inside the Commission
Thomas Ungerleider, M.D. (F)

37 The Crusade for Drug Law Reform
Joel Fort, M.D. (I)

Video Session I: Continuing Education (Videotape Special Session)

12:00 Psychodrama Sensitization for Crisis Intervention
Participants: H.L.P. Resnik, M.D. (F), James Enneis (I), Berkley C. Hathorne, Ph.D. (I), Gerald Hecht (I)

1:00 Primary Prevention: Group Meeting with Young Children
Presented by: Sheldon K. Schiff, M.D. (F)

2:15 Multiple Personality: A Reexamination
Participants: Stephen F. Bauer, M.D. (M), Fredric Coplon, M.D. (I), Emanuel Berman, Ph.D. (I), Otto Kernberg, M.D. (F), Merton Gill, M.D. (F), Arnold Ludwig, M.D. (M,

MONDAY, MAY 7 2:00 P.M.

Special Lecture

38 Community Mental Health in Great Britain
Douglas Bennett, M.D., D.P.M. (I), Institute of Psychiatry, The Maudsley Hospital, London, England

MONDAY, MAY 7 8:00 P.M.

Convocation of Eligible Fellows*

Presiding: *Perry C. Talkington, M.D. (LF), President*

Grand Marshalls: *Frances Cottington, M.D. (LF), Richard D. Kepner, M.D. (LF), Thomas W. Sugars, M.D. (LF)*

Music: *The Kamehameha High School Band*

Processional Marches

Invocation: *The Right Reverend Monsignor Charles A. Kekumano, Cathedral of Our Lady of Peace*

Induction of Fellows: *Alfred M. Freedman, M.D. (F), President-Elect*

Presentation of Awards

The William C. Menninger Memorial Convocation Lecture

39 Psychosocial Homeostasis (PSH): Toward a Sociocentric View of Man
Francis L.K. Hsu, Ph.D., Professor of Anthropology, Northwestern University, Evanston, Ill.

* An Eligible Fellow is one who attained such status prior to 1973.

TUESDAY, MAY 8 8:00 A.M.

Session I: Children

40 Are Children Reliable Reporters?
Barbara Herjanic, M.D. (M), Marijan Herjanic, M.D. (F), Freeman Brown (I), Theotis Wheatt (I)

41 Psychiatric Illness in the Pediatric Clinic
Dennis P. Cantwell, M.D. (M)

42 Geographic Mobility and the Military Child
Jon A. Shaw, M.D. (M), Jon Pangman (I)

43 Diagnosis of Mother-Infant Home Behavior
Wells Goodrich, M.D. (F)

44 Attention in Young Children of Psychotic Mothers
Henry Grunebaum, M.D. (F), Justin Weiss, Ph.D. (I), David H. Gallant, Ph.D. (I)

Session II: Studies of Therapeutic Outcome

45 Criteria for Psychotherapeutic Outcome
Peter E. Sifneos, M.D. (F)

46 Individual Versus Group Aftercare Treatment
Marvin I. Herz, M.D. (F), Robert L. Spitzer, M.D. (F), Miriam Gibbon, M.S.W. (I), Kenneth Greenspan, M.D. (M)

47 Blue-Collar Workers in Psychoanalytic Treatment
Nettie Terestman, D.S.W. (I), John J. Weber, M.D. (F), J. David Miller, M.D. (M)

48 CAPS: An Automated Evaluation System
Richard C. Evenson, Ph.D. (I), Ivan W. Sletten, M.D. (F), James L. Hedlund, Ph.D. (I), David M. Faintich (I)

49 The Psychiatric Patient at Work
David B. Robbins, M.D. (M), Arnold J. Kaminer, M.D. (I), Theodore Schussler, J.D. (I), Bernadette M. Teahan, R.N. (I), Isidor H. Pomper, M.S. (I)

Session III: Treatment of Affective Disorders

50 Lithium Prophylaxis in Affective Disorders
Robert J. Prien, Ph.D. (I), Eugene M. Caffey, M.D. (F), C. James Klett, Ph.D. (I)

51 A Guide for Drug Use in Depressive Disorders
Allen Raskin, Ph.D. (I)

52 Drugs and Group Therapy in Neurotic Depression
Lino Covi, M.D. (M), Ronald Lipman, Ph.D. (I), Leonard R. Derogatis, Ph.D. (I)

53 Treatment of Depression by Drugs and Psychotherapy
Gerald L. Klerman, M.D. (F), Alberto DiMascio, Ph.D. (I), Myrna Weissman, M.S.W. (I), Brigitte Prusoff, M.P.H. (I), Eugene S. Paykel, M.D. (M)

Session IV: Studies on Sleep and Dreams

54 Central Pain and Affect: Cortex and Midbrain Sleep
G. LaVonne Brown, M.D. (MT), William P. Wilson, M.D. (F), Blaine S. Nashold, Jr., M.D. (I)

55 Long-Term Drug Effects on Lab Sleep, Home Sleep, Mood
Ernest Hartmann, M.D. (F), James E. Cravens (I)

56 Unpredictable Sleepers: Insomniacs
Robert L. Williams, M.D. (F), Ismet Karacan, M.D. (F)

57 Sleep and Growth Hormone Secretion in Alcoholics
Ekkehard Othmer, M.D. (I), Donald W. Goodwin, M.D. (M), William R. Levine, M.D. (I), William H. Daughaday, M.D. (I)

58 Dreams and Dementia
Milton Kramer, M.D. (F), Thomas Roth, Ph.D. (I), John Trinder, Ph.D. (I)

Session V: Psychiatric Trends and Value Conflicts

59 Psychiatrists Evaluate Treatment: 1961–1972
J. Martin Myers, M.D. (F)

60 Psychiatry's Drift Away from Medicine
Richard A. Schwartz, M.D. (M)

61 Legal and Ethical Aspects of Behavior Control
Seymour L. Halleck, M.D. (F)

62 The Tyranny of Treatment
Jay G. Hirsch, M.D. (F), Gene H. Borowitz, M.D. (F)

63 Community Psychiatry at UCLA: A Decade of Training
Marvin Karno, M.D. (M), John G. Kennedy, Ph.D. (I), Sandra J. Lipschultz (I)

64 Sexual Role Stereotypy: An Issue Within Psychiatry
Leigh M. Roberts, M.D. (F)

Session VI: Transcultural Psychiatry

65 Aggression Among American Indian Tribes
Carl A. Hammerschlag, M.D. (M), Clayton P. Alderfer, Ph.D. (I)

66 Cuna and Otomi Healing Systems: A Comparison
Ricardo Galbis, M.D. (M)

67 The New Soviet Approach to the Unconscious
Nancy Rollins, M.D. (F)

68 Social Psychiatry in Hungary
Gusztav A. Batizy, M.D. (F)

69 Behind Chinese Acupuncture: Hypnosis?
William S. Kroger, M.D. (A)

70 Culture-Bound Neurosis in Japan
Masafumi Nakakuki, M.D. (A)

Session VII: Integrating Psychodynamics and Behavior Therapy (Joint Panel with the American Academy of Psychoanalysis)

71 Psychotherapy: The Restoration of Morale
Jerome D. Frank, M.D. (F)

72 Application of Psychodynamics to Behavior Therapy
John M. Rhoads, M.D. (F)

73 Intensive Group Therapy: An Effective Behavioral-Psychoanalytic Method
Lee Birk, M.D. (M)

74 Empiricism in Psychotherapy: Specification and Measurement
Robert P. Liberman, M.D. (M)

75 Therapy: Gold or Alloy?
Leon Salzman, M.D. (F)

76 Toward a Comprehensive Psychotherapy
Lewis R. Wolberg, M.D. (LF)

New Research

The sessions on new research are being presented again this year. Additional sessions will be held on Wednesday afternoon and on Thursday morning and afternoon. The papers in these sessions will consist of short presentations of recently collected research data. Since every effort was made to include new and exciting data, the papers were submitted after the deadline for printing this program. Consequently, the authors of these papers are not listed here. Program leaflets containing all of the details of the presentations will be available at the registration desk.

Films I: Gestalt Therapy (A New Series of Demonstration Films)*

F1 Questions as Statements
F2 The Little Things That Count
F3 Stuck in Marriage
F4 Polarities in Marriage
F5 Resentment in Marriage
F6 The Layers of Personality
F7 How We Manipulate Others

* This session continues until 11:00 a.m.

TUESDAY, MAY 8 12:00 P.M.

Adolf Meyer Lecture

77 (Title to be supplied)
Paul T.K. Lin, Ph.D. (I), Director, Center for East Asian Studies, McGill University, Montreal, Que., Canada

TUESDAY, MAY 8 2:30 P.M.

Business Session*

President: *Perry C. Talkington, M.D. (LF)*

Secretary: *Robert W. Gibson, M.D. (F)*

Call to Order: *Perry C. Talkington, M.D. (LF)*

Memorial to Deceased Members and Fellows

Announcement of Election of Officers and Trustees: *Morris Kleinerman, M.D. (LF), Chairman, Committee of Tellers*

Reports to the Membership
Secretary: *Robert W. Gibson, M.D. (F)*
Treasurer: *Hayden H. Donahue, M.D. (F)*
Speaker, Assembly of District Branches: *James C. Johnson, Jr., M.D. (F)*
Speaker-Elect, Assembly of District Branches: *Warren S. Williams, M.D. (F)*
Medical Director: *Walter E. Barton, M.D. (LF)*
Chairman, Committee on Constitution and By-Laws: *Warren S. Williams, M.D. (F)*

Old Business

New Business

Forum

Adjournment

* For voting members only, i.e., Members-in-Training, General Members, Life Members, Fellows, and Life Fellows.

TUESDAY, MAY 8 7:00 P.M.

Evening Panels

A Gender Identity Disorders: Upon Reflection
Moderator: Jon D. Meyer, M.D. (M)
Panelists: Robert J. Stoller, M.D. (F), Lawrence E. Newman, M.D. (M), Richard Green, M.D. (F), Norman M. Fisk, M.D. (M), Donald R. Laub, M.D. (I)

B Dialogue on Alcoholism
Moderator: John A. Ewing, M.D. (F)

Panelists: Keith S. Ditman, M.D. (F), Jack H. Mendelson, M.D. (F), Robert A. Moore, M.D. (F), E. Mansell Pattison, M.D. (F)

C Community Psychiatry Training: The Resident's View
Moderator: Edward J. Hornick, M.D. (F)
Panelists: Ronald L. Gatsik, M.D. (I), Peter Kimmel, M.D. (I), Humberto L. Martinez, M.D. (I), William R. McFarlane, Jr., M.D. (I), Manuel Trujillo, M.D. (I)

D The Psychotherapy of the Schizophrenic Patient: 1973
Moderator: Gerald J. Sarwer-Foner, M.D. (F)
Panelists: Clarence G. Schulz, M.D. (I), Jarl K. Dyrud, M.D. (I), P. Giovacchini, M.D. (F), John S. Kafka, M.D. (F)

E To What Avail? U.S. and Canadian Drug Commissions
Moderator: J.R. Unwin, M.D. (F)
Panelists: Daniel X. Freedman, M.D. (F), Seymour L. Halleck, M.D. (F), Lionel P. Solursh, M.D. (I), J. Thomas Ungerleider, M.D. (F)

F Mental Health Training in the 70s
Moderator: James S. Eaton, Jr., M.D. (M)
Panelists: Frederick R. Hine, M.D. (F), Dewitt C. Baldwin, Jr., M.D. (M), James Tenzel, M.D. (M), John Romano, M.D. (LF)

G Psychiatry and Foreign Affairs: The India-Pakistan Conflict
Moderator: Vamik D. Volkan, M.D. (F)
Panelists: Jerome D. Frank, M.D. (F), Rita R. Rogers, M.D. (F), Jajdeesh Teja, M.D. (M), Tajammul Bhatti, M.D. (MT), William D. Davidson, M.D. (F)

H Sex Offenders: Psychiatric and Forensic Research
Moderator: Joseph J. Peters, M.D. (M)
Panelists: Hermann A. Roether, Ph.D. (I), Carol D. Bohmer, LL.M. (I), James M. Pedigo, M.D. (M), Eleanor Ross, Ph.D. (I), Lance S. Wright, M.D. (F)

I Effects on Individual Psychology of Changes in Contemporary Morality
Moderator: John S. Kafka, M.D. (F)
Panelists: John C. Nemiah, M.D. (F), Edward D. Joseph, M.D. (F), Jeanne Spurlock, M.D. (F), Norman E. Zinberg, M.D. (F), Frederic T. Kapp, M.D. (F)

J The Psychology of Chess
Moderator: Stuart R. Schwartz, M.D. (M)
Panelists: Richard D. Chessick, M.D. (F), Norman Reider, M.D. (LF), Reuben Fine, Ph.D. (I), Burt Hockberg (I)

K Treatment Contracts in Transactional Analysis
Moderator: John M. Dusay, M.D. (M)
Panelists: William H. Holloway, M.D. (F), David B. Jarvis, M.D. (M), Roberto Kertesz, M.D. (I), John J. O'Hearne, M.D. (F)

L Demonstration of Encounter Techniques
Moderator: William E. Moore, M.D. (M)
Panelist: Nicholas Fish, M.D. (F)

M The Psychiatric Clerkship in the New Curriculum
Moderator: David W. Preven, M.D. (M)
Panelists: Irwin Feinberg, M.D. (M), Leston Havens, M.D. (F), Bryce Templeton, M.D. (M), Sidney Werkman, M.D. (F)

N The Psychiatrist as Organizational Change Agent
Moderator: Carl A. Hammerschlag, M.D. (M)
Panelists: Boris M. Astrachan, M.D. (M), Garrett O'Connor, M.D. (M)

O The Bremer Case: Interpreting Responsibility
Moderator: Jonas R. Rappeport, M.D. (F)
Panelists: Eloise Agger, A.C.S.W. (I), Robert L. Sadoff, M.D. (F), Eugene C. Stammeyer, Ph.D. (I), Eugene B. Brody, M.D. (F), William L. Putzel, J.D. (I)

P Measuring the Teaching of Introductory Psychiatry
Moderator: Paul Miller, M.D. (F)
Panelists: David Cline, M.D. (M), Duane Hagen, M.D. (M), Russell Monroe, M.D. (F), Joe P. Tupin, M.D. (F)

Q Psychiatry and Religion: Task for the 70s
Moderator: Abraham N. Franzblau, M.D., Ph.D. (F)
Panelists: Angelo D'Agostino, M.D. (F), Emanuel M. Honig, M.D. (F), Merritt H. Egan, M.D. (M), Edgar Draper, M.D. (F)

R Metapsychiatry and the Psychic Mystique
Moderator: Ramon Parres, M.D. (F)
Panelists: Stanley R. Dean, M.D. (F), Aristide H. Esser, M.D. (M), George G. Ritchie, M.D. (M), Russell Noyes, M.D. (F)

S Psychiatric Physician's Associates
Moderator: M.J. Short, M.D. (M)
Panelists: Samuel Herring (I), Adrian B. Boone (I), Lois Pennel, R.N. (I), Hal G. Gillespie, M.D. (M), Elizabeth B. Harkins, M.S.W., A.C.S.W. (I)

T The Executive: Choice, Commitment, and Conflict
Moderator: Barrie S. Greiff, M.D. (M)
Panelists: John MacIver, M.D. (F), Duane Hagen, M.D. (M), Margaret Hennig, Ph.D. (I), Stuart Taylor, Ph.D. (I)

U Community Mental Health Programs for Children
Moderator: Michael E. Fishman, M.D. (F)
Panelists: Arthur Carfagni, M.D. (M), Vernon Kliewer, M.D. (M), Thomas M. Haizlip, M.D. (M), C. Wallace Dalley, M.D. (M), Lawrence S. Rubin, Ph.D. (I)

V Sex Education in Medical Schools
Moderator: David B. Marcotte, M.D. (M)
Panelists: Ira Reiss, Ph.D. (I), Harold I. Lief, M.D. (F), Francis J. Kane, Jr., M.D. (F), Takey Crist, M.D. (I), Jay Mann, Ph.D. (I)

W Schizophrenia as Life-Style
Moderator: Werner M. Mendel, M.D. (F)
Panelists: Arthur Burton, Ph.D. (I), Juan J. Lopez-Ibor, M.D. (DF), Loren R. Mosher, M.D. (M), Jordan M. Scher, M.D. (M)

X Eco-Epidemiology in Prevention of Mental Illness
Moderators: A.D. Schwartz, M.D., M.P.H. (M), Robert C. Marvit, M.D., M.Sc. (M)
Panelists: Fred L. Dunn, M.D., D.T.M. & H. (I), John B. Calhoun, Ph.D. (I), Roderic Gorney, M.D. (F), Ernest M. Gruenberg, M.D., D.P.H. (F)

Y The History of Psychiatry in Residency Training
Moderator: Fred M. Sander, M.D. (M)
Panelists: Leo H. Berman, M.D. (F), Dave Musto, M.D. (M), David Werman, M.D. (M), C. Christian Beels, M.D. (M)

Z1 Crisis in the Care of Chronic Patients
Moderator: Marvin I. Herz, M.D. (F)
Panelists: Robert A. McKinley, M.D. (F), June Christmas, M.D. (F), A. Anthony Arce, M.D. (F), Jack Wilder, M.D. (F)

Z2 Young Psychiatrists at NIMH: Boon or Bust?
Moderator: J. David Miller, M.D. (M)
Panelists: David Berenson, M.D. (I), Frank M. Ochberg, M.D. (M), Alan I. Levenson, M.D. (F)

Z3 Psychiatrists in Conflict
Moderator: Raymond W. Waggoner, M.D. (LF)
Panelists: John Visher, M.D. (F), Harold Visotsky, M.D. (F), Judge David Bazelon (I), Joseph G. Perpich, M.D. (MT), Donald Light (I)

Z4 Transcultural Studies of Schizophrenia
Moderator: Robert Cancro, M.D. (F)
Panelists: John S. Strauss, M.D. (M), Lyman C. Wynne, M.D. (F), E. Fuller Torrey, M.D. (M), Martin M. Katz, Ph.D. (I)

Z5 New Directions in Psychiatric School Consultation
Moderator: Gene H. Borowitz, M.D. (F)
Panelists: Spencer A. Ward, M.D. (M), Frank T. Rafferty, M.D. (F), Beatrice Hamburg, M.D. (I), Jay G. Hirsch, M.D. (F), Gaston E. Blom, M.D. (F)

WEDNESDAY, MAY 9 7:00 A.M.

Morning Panels

W1 New JCAH Standards for Psychiatric Facilities
Moderator: Roy Menninger, M.D. (F)
Panelists: Hayden H. Donahue, M.D. (F), Albert G. Sheff, M.D. (MT), Dean Brooks, M.D. (F), John T. Holbrook, M.D. (A), Robert A. Moore, M.D. (F)

W2 Research Training in Psychiatric Residency: Pro and Con
Moderator: James R. Stabenau, M.D. (F)
Panelists: Robert Cancro, M.D. (F), David Hamburg, M.D. (F), Robert Michels, M.D. (F), Daniel X. Freedman, M.D. (F)

W3 Consultation to Community Agencies
Moderator: Stewart E. Teal, M.D. (M)
Panelists: James Spensley, M.D. (M), M. Nawaz Kaleel, M.D. (M), Gerald Coon, M.D. (M), Margaret Steward, Ph.D. (I), Stephen Silberstein, M.D. (M)

W4 Continuing Education of Clergymen in Mental Health
Moderator: Dana L. Farnsworth, M.D. (F)
Panelists: Richard E. Hicks, M.D. (M), Randall Mason, Ph.D. (I), James J. Gill, M.D. (A), Norman A. Clemens, M.D. (F)

W5 Liaison Psychiatry: A Resident Educative Process?
Moderator: Robert O. Pasnau, M.D. (F)
Panelists: Klaus D. Hoppe, M.D. (F), Richard H. Rahe, M.D. (F), Marvin Karno, M.D. (M), Daniel B. Auerbach, M.D. (MT), Burton Roger, M.D. (MT)

W6 Practical Problems of Methadone Treatment
Moderator: Charles P. O'Brien, M.D., Ph.D. (M)
Panelists: John Renner, M.D. (M), Barry M. Ramer, M.D. (F), Jacob Schut, M.D. (M), William F. Wieland, M.D. (M)

W7 Complications of Psychiatric Hospitalization
Moderator: Louis B. Fierman, M.D. (F)
Panelists: Boris M. Astrachan, M.D. (M), Robert K. Davies, M.D. (I), Mehadin K. Arafeh, M.D. (F), Lane Ameen, M.D. (F)

W8 Incentive Reimbursement for Mental Health Staffs
Moderator: David J. Muller, M.D. (M)
Panelists: Jack F. Wilder, M.D. (F), George M. Burnell, M.D. (F), Dennis F. Rupel, M.D. (M), William H. Goodson, Jr., M.D. (M)

W9 Comprehensive Health Plans Might Omit Psychiatry
Moderator: Robert L. Williams, M.D. (F)
Panelists: David Wade, M.D. (F), James Harris, M.D. (F), Marvin Perkins, M.D. (F), Collin Rorrie, M.D. (I), Edward G. Long, M.D. (F)

W10 Myths and Realities: Training the Paraprofessional
Moderator: Muriel K. Taylor, M.D. (M)
Panelists: Maxine K. Anderson, M.D. (M), Delois Brown, R.N.M.S. (I), Helen Nash, Ph.D. (I), William Womach, M.D. (M)

W11 Turning a State Hospital Inside Out: Part II
Moderator: John A. Talbott, M.D. (F)
Panelists: Robert Reich, M.D. (M), Vera Paster, Ph.D. (I), Marvin Herz, M.D. (F), Winifred Winikus, M.S.W. (I), A. Anthony Arce, M.D. (F)

W12 The POMR and Psychiatric Teams
Moderator: Donald R. Fowler, M.D. (M)
Panelists: Richard Longabaugh, Ed.D. (I), Nicholas Nunez, M.D. (M), Clare P. Sullivan, M.A., R.N. (I), Margaret M. Walker, M.S.S.W. (I)

W13 Heart Attack Psychic Factors from CCU to Recovery
Moderator: Edward L. Chesne, M.D. (I)
Panelists: Thomas P. Hackett, M.D. (F), Wilfred Dorfman, M.D. (F)

W14 Adolescent Impulse Disorders
Moderator: Lewis F. Wesselius, M.D. (F)
Panelists: Richard Marohn, M.D. (M), Robert E. Gould, M.D. (F), Edwin Levy, M.D. (F), Doyle I. Carson, M.D. (F)

W15 Recent Research in Memory: Clinical Implications
Moderator: Richard Stillman, M.D. (M)
Panelists: Donald W. Goodwin, M.D. (M), Jared Tinklenberg, M.D. (M), Dennis L. Murphy, M.D. (M), Herbert Weingartner, Ph.D. (I)

W16 New Advances in Transactional Analysis
Moderator: Robert C. Drye, M.D. (F)
Panelists: John M. Dusay, M.D. (M), Stephen B. Karpman, M.D. (I), Pamela J. Levin, R.N. (I)

W17 Child Advocacy: A Review of Progress
Moderator: Jack C. Westman, M.D. (F)
Panelists: Spencer A. Ward, M.D. (M), Brenda G. McGowan, M.S.W. (I), John F. Leonard, M.D. (F), William M. Bolman, M.D. (M)

W18 Continuing Education: Its Application to Psychiatry
Moderator: Hugh T. Carmichael, M.D. (LF)
Panelists: Bryce Templeton, M.D. (M), Donald H. Naftulin, M.D. (F), S. Mouchly Small, M.D. (LF), Shervert H. Frazier, M.D. (F)

W19 The Female Resident Experience: Problems, Pleasures
Moderator: Elissa P. Benedek, M.D. (F)
Panelists: Gail M. Barton, M.D. (MT), Christine Bieniek, M.D. (I), Anne Seiden, M.D. (A), Carol Wolman, M.D. (MT)

W20 Alienation: Existential and Cultural Aspects
Moderator: Frank A. Johnson, M.D. (F)
Panelists: Jordan M. Scher, M.D. (M), Robert J. Lifton, M.D. (F), Alvin R. Poussaint, M.D. (F), Eugene A. Kaplan, M.D. (F), Donald Oken, M.D. (F)

W21 Mental Health in Spanish-Speaking Communities
Moderator: James N. Sussex, M.D. (F)
Panelists: Pedro Ruiz, M.D. (M), Fernando Milanes, M.D. (M), Ricardo Galbis, M.D. (M), Alberto C. Serrano, M.D. (M), Jose R. Lombillo, M.D. (M)

W22 Psychiatry for OEO and Model Cities Programs
Moderator: Kim A. Keeley, M.D. (M)
Panelists: James A. Alford, M.D. (F), Yvonne Connor (I), Charles Wright (I), Chester Pughsley (I), Mary Green, M.S.W. (I)

W23 "The Village System": Health Care Delivery in South Carolina
Moderator: Raymond Ackerman, M.D. (M)
Panelists: Robert L. Chartier, M. of Arch. (I), George C. Means, Jr., M. of Arch. (I), Linda S. Martin, M.S.W. (I), Lilyan R. Klein, R.N. (I), D. Devon Pollard, M.D. (M)

W24 Training in Community Mental Health
Moderator: Israel Zwerling, M.D. (F)
Panelists: E. Mansell Pattison, M.D. (F), Donald G. Langsley, M.D. (F), Richard T. Rada, M.D. (M), Edward J. Hornick, M.D. (F), Allan Beigel, M.D. (M)

W25 Ethical Issues in Correctional Psychiatry
Moderator: Luke I. Kim, M.D., Ph.D. (A)
Panelists: Paul L. Loeffelholz, M.D. (MT), Harold M. Boslow, M.D. (F), Bernard L. Diamond, M.D. (F), T.L. Clanon, M.D. (F)

W26 The Sexually Active Teen-ager: Psychiatrist's Role
Moderator: John C. Nemiah, M.D. (F)
Panelists: Malkah Notman, M.D. (M), Pamela Lowry (I), Cornelia M. Friedman, M.D. (M), Carol Nadelson, M.D. (M)

W27 Issues in Psychiatric Training
Moderators: William Van Veen, M.D. (M), Daniel Offer, M.D. (F)
Panelists: David E. Raskin, M.D. (M), John Racy, M.D. (M), Theodor Bonstedt, M.D. (F), Paul J. Fink, M.D. (F)

WEDNESDAY, MAY 9 9:00 A.M.

Session I: Pregnancy and Abortion

78 Exnuptial Pregnancy in New Zealand
John S. Werry, M.D. (I), Christine M. Taylor (I), Denis G. Bonham, M.D. (I), Ann S. Pearson, M.A. (I)

79 Motivational Factors in Pregnant Adolescents
Francis J. Kane, Jr., M.D. (F), Charles A. Moan, Ph.D. (I), Barbara Bolling (I)

80 Making Abortion Consultation Therapeutic
Cornelia M. Friedman, M.D. (M)

81 This paper was dropped from the program after it had been numbered and set in type.

82 The "Abortion Pseudopsychosis"
Martin M. Bier, M.D. (MT), Frederick S. Mittleman, M.D. (MT)

Session II: Suicide

83 American Indian Suicide: Fact and Fantasy
James H. Shore, M.D. (M)

84 Prognostic Factors in Attempted Suicide
Ari Kiev, M.D. (F)

85 Psychiatric Staff Suicides: Taboo Subject?
Abba E. Borowich, M.D. (MT), Edward D. Joseph, M.D. (F)

86 Observations on Suicide in Chronic Schizophrenics
Paul E. Yarden, M.D. (M)

87 Suicide in Schizophrenia: A Ten-Year Follow-Up
Brenda D. Gurel, Ph.D. (I), Lee Gurel, Ph.D. (I)

Session III: Drugs in the Treatment of Human Aggression

88 Pharmacologic Treatment of Aggression
Russell R. Monroe, M.D. (F)

89 Lithium and Impulsive-Aggressive Behavior
Michael H. Sheard, M.D. (M)

90 Neuroleptics and Newer Psychotropic Agents: The Major Tranquilizers
Turan M. Itil, M.D. (M)

91 Benzodiazepines and the Minor Tranquilizers
Carlos Azcarate, M.D. (M)

92 Hormones and Antihormone Agents
Dietrich Blumer, M.D. (M), Claude J. Migeom, M.D. (M)

93 Effect of CNS Stimulants (Amphetamines) and Other Experimental Agents (Hallucinogens, Narcotics) on Human Aggression
Leon Wurmser, M.D. (F), Willem G.A. Bosma, M.D. (M)

Session IV: Psychobiology II

94 Corticotropin Release During ECT in Man
John P. Allen, M.D. (I), Rebecca F. McGilvra (I), John W. Kendall, M.D. (I), Duane Denney, M.D. (M)

95 Primate Social Isolation: Psychiatric Implications
William T. McKinney, Jr., M.D. (M)

96 Failure of DMT to Evoke Tolerance in Cats
J. Christian Gillin, M.D. (M), Eleanor Cannon (I), Regis L. Magyar (I)

97 Abnormal EEG and Compulsive Eating Disorders
Richard S. Green, M.D. (F), John J. Rau, Ph.D. (I)

98 Electrosleep Therapy: A Double-Blind Trial
Earl D. Hearst, M.D. (I), C. Robert Cloninger, M.D. (I), Eugene L. Crews, M.D. (I), Remi J. Cadoret, M.D. (M)

Session V: Payment Systems for Mental Health Service and Their Consequences

99 High-Quality Low-Cost Prepaid Psychiatric Service
Werner M. Mendel, M.D. (F), Samuel Rapport, M.D. (A), Jann Glasser, M.S.W. (I)

100 A Paradigm of a Complete Third-Party Payment System
Harvey L. Ruben, M.D. (M)

101 Mental Health Coverage Under National Insurance
Robert L. Taylor, M.D. (M), E. Fuller Torrey, M.D. (M)

102 National Health Insurance and Psychotherapy
William L. Granatir, M.D. (F)

103 Third-Party Payment: Transferential Considerations
Sidney S. Goldensohn, M.D. (M), Esther Haar, M.D. (M)

104 The Case for Psychiatric Hospitalization
Charles J. Rabiner, M.D. (F), Abraham Lurie, Ph.D. (I)

Session VI: Transcultural Aspects of Psychiatric Training and Psychopathology

105 Child Psychiatry for Foreign Pediatric Residents
Elisabeth Lassers, M.D. (A), Robert Nordan, Ph.D. (I), Myrna Quintos, M.D. (I), Silviano Gomez, M.D. (I)

106 Meeting Training Needs of State Hospital Residents
William F. Knoff, M.D. (F), Donald Oken, M.D. (F), James A. Prevost, M.D. (M)

107 American Psychiatry for Export: Special Training
John F. McDermott, Jr., M.D. (F), Thomas W. Maretzki, Ph.D. (I), Danilo E. Ponce, M.D. (M)

108 Toward the Assessment of Ethnic-Related Symptoms
Victor Bernal, M.D. (F)

109 Community Psychiatry in a Foreign Country: Malaysia
J. David Kinzie, M.D. (M), J.I. Teoh, M.B. (I), Eng-Seong Tan, M.D. (I)

110 Psychiatry in Hawaii: A Short History
William J.T. Cody, M.D. (F)

Session VII: Should Homosexuality Be in the APA Nomenclature?

111 Stop It, You're Making Me Sick!
Ronald Gold (I)

112 Homosexuality: An Adaptive Consequence of Disorders in Psychosexual Development
Irving Bieber, M.D. (F)

113 Homosexuality and Cultural Value Systems
Judd Marmor, M.D. (F)

114 Should Heterosexuality Be in the APA Nomenclature?
Richard Green, M.D. (F)

115 Criteria for Psychiatric Diagnoses
Robert J. Stoller, M.D. (F)

Video Session II: Continuing Education (Videotape Special Session)

9:00 Medical Marriages
Participants: Robert E. Taubman, M.D. (M), George Saslow, M.D. (M), Paul H. Blachly, M.D. (M), Daniel H. Labby, M.D. (M), Agnar A. Straumfjord, M.D. (M)

10:30 Save the Spouse: Therapy with Young Couples
Participants: Richard A. Crocco, M.D. (M), Leon Robinson, M.D. (M), Jack O. Bradt, M.D. (M)

WEDNESDAY, MAY 9 10:00 A.M.

Benjamin Rush Lecture

116 (Title and author to be supplied)

WEDNESDAY, MAY 9 2:00 P.M.

Session I: Mental Health of Children

117 Endogenous Depression in Infancy and Childhood

Helen J. Ossofsky, M.D. (A)

118 Open-Ended Brief Group Therapy on a Pediatric Ward
Paul C. Laybourne, Jr., M.D. (F), Suzy Shupe, R.N. (I), S. James Sikkema, S.W.S. (I)

119 The Psychological Effects of Childhood Rape
Joseph J. Peters, M.D. (M)

120 Mental Health Services to a Day Care System
Gordon A. Heath, M.D. (M), Vaughn A. Hardesty, Ph.D. (I)

121 The Model Dorm: Changing Indian Boarding Schools
Robert L. Bergman, M.D. (M), George S. Goldstein, Ph.D. (I)

122 Standard Versus Nonstandard English in Group Testing of Black Children
Robert L. Williams, Ph.D. (I), L. Wendell Rivers, Ph.D. (I)

Session II: Trends in Psychiatric Education

123 A Program of Continuing Education in Psychotherapy
Christopher T. Bever, M.D. (F)

124 Research Education: A Core Part of the Residency
Anne M. Seiden, M.D. (A)

125 Comprehensive Training in Forensic Psychiatry
Robert L. Sadoff, M.D. (F)

126 Adapting Videotape Techniques to Levels of Training
Peter G. Wilson, M.D. (F)

127 Behaviors to Motivate Teachers of Human Behavior
Harvey R. Langee, M.D. (M), Alan Arnson, M.D. (M), Ayres D'Costa, Ph.D. (I), Haikaz Grigorian, M.D. (M), F.P. McKegney, Jr., M.D. (M), Ronald Richards, Ph.D. (I)

128 The Solo Woman in a Professional Peer Group
Carol S. Wolman, M.D. (MT), Harold H. Frank, Ph.D. (I)

Session III: Heroin Addiction

129 The Quality of Treatment for Drug Abuse
Frederick B. Glaser, M.D. (M), Freda Adler, Ph.D. (I), Arthur D. Moffett, M.S.W. (I), John C. Ball, Ph.D. (I)

130 Heroin Addiction: Light at the End of the Tunnel
Robert L. DuPont, M.D. (M), Mark H. Greene, M.D. (I)

131 One-Year Follow-Up of Addicted Viet Nam Veterans
Frank Estrada (I), Alex Richman, M.D. (M), Donald W. Morgan, M.D. (M)

132 Heroin Use: "Contagious Disease" or Social Problem?
Donald W. Morgan, M.D. (M), John F. Greden, M.D. (M), Sinai I. Frenkel, Ph.D. (I)

133 Comparison: Inner-City and Suburban Heroin Users
Kenneth G. Schooff, M.D. (M), Eugene Ebner, Ph.D. (I), David G. Lowy, Ph.D. (I), Ronald Hersch, Ph.D. (I)

134 Starch Craving (Pica) in Pregnant Heroin Addicts
Alex Richman, M.D. (M), Jean Gardner, R.D. (I), George Blinick, M.D. (I)

Session IV: Schizophrenia: Outcome Studies

135 The Validity of Schizo-Affective Schizophrenia
V. B. Tuason, M.D. (M), Earl D. Hearst, M.D. (I)

136 Computer EEG: Predictor of Outcome in Schizophrenia
Turan M. Itil, M.D. (M), Bernd Saletu, M.D. (I), John Marasa, M.S. (I), Anthony Mucciardi, Ph.D. (I)

137 Typologies of Outcome of Schizophrenia
Boris M. Astrachan, M.D. (M), Lee Brauer, M.D. (I), Martin Harrow, Ph.D. (I), Carol C. Schwartz, Ph.D. (I)

138 Catatonic Schizophrenia: Prediction of Outcome from Onset
James R. Morrison, M.D. (M)

139 Schizophrenia: Treatment and Follow-Up Worldwide
Elaine Rogan, Ph.D. (I), Thomas M. Sullivan, M.D. (F), H. Warren Dunham, Ph.D. (I)

Session V: Adaptation to Stress

140 Life Changes, Subjective Stress, and Accidents
Melvin L. Selzer, M.D. (F), Amiram Vinokur, Ph.D. (I)

141 The Mortality and the Morbidity of Widowhood
Paula J. Clayton, M.D. (M)

142 Crisis of Separation and Divorce
Gerald F. Jacobson, M.D. (F)

143 Waiting Wives: Women Under Stress
Douglas R. Bey, M.D. (M), Jean Lange (I)

144 A Hope Scale Applicable to Verbal Samples
Louis A. Gottschalk, M.D. (F)

145 Value Priorities, Leisure, Angst, and Joy
Charles M. Gaitz, M.D. (F), Chad Gordon, Ph.D. (I), Judith Scott, M.A. (I)

Session VI: Psychiatric Cross-Cultural Research in Hawaii

146 Stress in a Hawaiian-American Community
Alan Howard, Ph.D. (I)

147 Perceptual Differences in Nurses' Ratings of Patients
Ken Sanborn, Ph.D. (I)

148 The Absent Father Syndrome
Danilo Ponce, M.D. (I), Vincent Lee, M.S.W. (I)

149 Alcoholic Treatment Center at Hawaii State Hospital
Richard Markoff, M.D. (F), William O'Rourke (I), John F. McDermott, Jr., M.D. (F)

150 Psychiatric Consultation to a Filipino Community
Benjamin Young, M.D. (I)

Session VII: Psychiatry and HMOs: Developments on a New Frontier

The first portion of this session will be based on: 1) a survey by the NIMH Task Force on Health Maintenance Organizations (HMOs) of mental health services in nine prepaid medical groups; 2) a federal survey by the Health Services and Mental Health Administration of mental health benefits in HMO prototypes; and 3) a study of HEW Region IX psychiatric HMO-like organizations to develop government policy, guidelines, or applications. In the second part of the session four psychiatrists will report on their experiences directing mental health efforts in prepaid health plans.

151 Mental Health and HMOs: Perspective and Prospects
Herzl R. Spiro, M.D. (F)

152 Marketing Mental Health Benefits to HMOs
Mildred Arrill, M.A., M.S.W. (I)

153 Free-Standing Private Mental Health Programs: Problems and Potentials
Ellen Canepa, M.D., M.P.H. (I)

154 Models of Mental Health Programs in HMO Prototypes
Harold R. Hunter, Ph.D. (I)

155 Oh Management! Oh Productivity!
Jack R. Brown, M.D. (M)

156 Is There a Doctor in the House?
Daniel Y. Patterson, M.D. (M)

157 Current Mental Health Goals in an HMO Model
Robert L. Harrington, M.D. (I), George M. Burnell, M.D. (F)

New Research

The sessions on new research are being presented again this year. Additional sessions were held on Tuesday morning and will be held on Thursday morning and afternoon. The papers in these sessions will consist of short presentations of recently collected research data. Since every effort was made to include new and exciting data, the papers were submitted after the deadline for printing this program. Consequently, the authors of these papers are not listed here. Program leaflets containing all of the details of the presentations will be available at the registration desk.

Films II: Special Feature*

F8 Wednesday's Child

*This session continues until 5:00 p.m.

WEDNESDAY, MAY 9 7:30 P.M.

Annual Banquet and Dance

Presiding Officer: *Perry C. Talkington, M.D. (LF), President*

Presentation of Awards

THURSDAY, MAY 10 8:00 A.M.

Session I: New Models of Mental Health Counseling

158 Teacher-Counselors as Mental Health Intermediaries
Charles R. Keith, M.D. (F), Lucy T. Davis, Ph.D. (I)

159 Mental Health Education for College Professors
John L. Kuehn, M.D. (M), Susanne M. Jensen, Ph.D. (I), Myron Mohr, Ph.D. (I)

160 Affiliative Therapy for Mentally Disturbed Youth
Alan J. Rosenthal, M.D. (M), Josephine R. Hilgard, M.D. (M), Ursula S. Moore, M.S.W. (I)

161 The Peer Counseling Movement
Gordon D. Jensen, M.D. (F)

162 Joint Sexual Counseling by a Husband/Wife Team
Saul H. Rosenthal, M.D. (M), Chauncey F. Rosenthal, R.N. (I)

Session II: Evaluation and Evaluators: New Trends

163 An Evaluation of Evaluations
S. Mouchly Small, M.D. (LF), Peter F. Regan, M.D. (F)

164 Evaluation of Psychiatric Residency Training
George C. Bolian, M.D. (F), Kwong Y. Lum, M.D. (F)

165 Outcome Studies in Psychiatric Evaluation Research
Carol C. Schwartz, Ph.D. (I), Jerome K. Myers, Ph.D. (I), Boris M. Astrachan, M.D. (M)

166 Can the Computer Assist Clinicians in Diagnosis?
Robert L. Spitzer, M.D. (F), Jean Endicott, Ph.D. (I)

167 Computer Diagnosis in Psychiatry: Bayes Approach
R.M.A. Hirschfeld, M.D. (MT), Robert L. Spitzer, M.D. (M), R.G. Miller, Ph.D. (I)

168 Psychiatrists' Evaluations of 50 Journals
Don A. Rockwell, M.D. (F)

Session III: Marijuana

169 Marijuana: Acute, Chronic, and Therapeutic Effects

Ira M. Frank, M.D. (M), Louise D. Epps, Ph.D. (I), Robert Helper, M.D. (I)

170 Marijuana and Physiological Reactivity to Stress
William H. Rickles, Jr., M.D. (M), Michael J. Cohen, Ph.D. (I), Robert S. Naimark (I)

171 Psychosocial Adaptation of College Marijuana Users
Joel S. Hochman, M.D. (A), Richard L. Christie, M.A. (I), Norman Q. Brill, M.D. (LF)

172 Is Marijuana a Drug? Answers from Addicts
Jacob Schut, M.D. (M), Theodora Wohlmuth (I), Karen File, M.U.A. (I), Barbara Naglin, M.S.W. (I)

173 Combat Zone Adjustment: The Role of Marijuana Use
Steven M. Mirin, M.D. (M), Gerald J. McKenna, M.D. (I)

174 Cannabis Indica in 19th-Century Psychiatry
Eric T. Carlson, M.D. (F)

Session IV: Genetics and the Treatment of Affective Disorders

175 CSF Rubidium Metabolism in Depression
David L. Dunner, M.D. (A), Herbert L. Meltzer, Ph.D. (I), Ronald R. Fieve, M.D. (F)

176 Hazards of Lithium Prophylaxis
Gottfried K. Spring, M.D. (M)

177 Lithium Prophylaxis as Determined by Family Study
Julien Mendlewicz, M.D. (I), Ronald R. Fieve, M.D. (F)

178 Research in Genetics and Psychiatry
James R. Stabenau, M.D. (F)

179 Psychiatry, Cytogenetics, and Genetic Mass Screening
Michael A. Sperber, M.D. (A)

Session V: Reactions and Adaptation to Developmental and Situational Stress

180 Sex and the Senior Citizen
Stanley R. Dean, M.D. (F)

181 A New Dimension of the Youth Culture
Armand M. Nicholi, Jr., M.D. (F)

182 The New Morality on the College Campus
Samuel Janus, Ph.D. (I), Barbara Bess, M.D. (M)

183 Partners in Dying
Harold Levine, M.D. (I), Susan P. Levine, M.D. (M)

184 Four Wars, 53 Life Histories: Therapy Implications
Enrique Araneta, Jr., M.D. (A), Phillip Singer, M.D. (I), Carl R. Vann (I)

Session VI: Japanese Americans: A Fusion of East and West

185 Japanese Enterprise and U.S. Middle-Class Values
Joe Yamamoto, M.D. (F), Mamoru Iga, Ph.D. (I)

186 Comparative Symptom Clusters: Japanese Versus Americans
Thomas W. Maretzki, Ph.D. (I)

187 Observations on Verbal Styles in Japanese-Americans
Anthony Marsella, Ph.D. (I), Frank A. Johnson, M.D. (F)

188 Naikan, Morita, and Western Psychotherapy: A Comparison
Takao Murase, M.A. (I), Frank A. Johnson, M.D. (F)

189 Generations and Ethnicity: The Japanese in Honolulu
Colleen L. Johnson, Ph.D. (I)

Session VII: Caveat Doctor! Organic Ills in Psychiatric Clothing (Sponsored by the APA/American College of Physicians Task Force)

Three medical experts will each discuss organic syndromes arising in their field of expertise that mimic psychogenic disease in their symptomatology. Presentations will be made for 20 minutes each covering the following general areas: Dr.

Heath on neurologic disorders (brain tumor, subdural hematoma, multiple sclerosis, cranial arteritis, etc.); Dr. Moser on medical diseases masquerading as psychic disorders; Dr. Escamilla on endocrine disorders (pituitary, thyroid, parathyroid, and adrenal hyper- and hypofunction). A question and answer period will be arranged to round out the program.

Moderator: Robert Heath, M.D. (F)
Panelists: Robert Heath, M.D. (F), Robert Moser, M.D. (I), Roberto Escamilla, M.D. (I)

New Research

The sessions on new research are being presented again this year. Additional sessions were held on Tuesday morning and Wednesday afternoon and will be held on Thursday afternoon. The papers in these sessions will consist of short presentations of recently collected research data. Since every effort was made to include new and exciting data, the papers were submitted after the deadline for printing this program. Consequently, the authors of these papers are not listed here. Program leaflets containing all of the details of the presentations will be available at the registration desk.

Films III: Women in America*

F9 It Happens to Us

F10 Three Lives

*This session continues until 11:00 a.m.

THURSDAY, MAY 10 12:00 P.M.

Session I: Primary Prevention and Childhood Stress

190 This paper was dropped from the program after it had been numbered and set in type.

191 The Social System and Children's Behavior Problems
Graham A. Rogeness, M.D. (M), Richard A. Bednar (I), Herman Diesenhaus, Ph.D. (I)

192 Preventing the Abuse of Little Children
Richard Galdston, M.D. (M)

193 Preventive Implications of Parent Education
Irving N. Berlin, M.D. (F), Roxie Berlin, Ph.D. (I)

Session II: Current Trends and Issues in the Medical School Setting and Graduate Training

194 The Elimination of the Internship in Psychiatry
Byram T. Karasu, M.D. (M), Stefan P. Stein, M.D. (M), Edward Charles, M.A. (I)

195 Six-Year Specialists: A Progress Report
James A. Rugowski, M.D. (I), John R. Marshall, M.D. (M)

196 Time-Limited Medical Student Sensitivity Groups
Stephen S. Dashef, M.D. (I), William M. Espey, M.D. (I), Jeremy A. Lazarus, M.D. (I)

197 Psychiatry Learning System: A Preliminary Report
Patricia M. Randels, M.D. (M), R. Layton McCurdy, M.D. (F), William S. Powell, M.D. (M)

198 Medical School and the Process of Disillusionment
Arthur H. Schwartz, M.D. (M), Marshall Swartzburg, M.D. (M), Julian L. Lieb, M.B.B. Ch. (I), Andrew E. Slaby, M.D. (I)

199 Through the Viewing Tube: Videocassette Psychiatry
David V. Forrest, M.D. (M), James H. Ryan, M.D. (F), Richard Glavin, M.D. (F), H. Houston Merritt, M.D. (M)

Session III: Alcoholism

200 Alcoholism and Allergy

George A. Ulett, M.D. (F), Ellen Itil (I)

201 Alcoholism Service Planning: The Prevalence Survey
Allan Beigel, M.D. (M), E. James Hunter, M.S. (I), John Tamerin, M.D. (M), Edwin A. Chapin, M.S. (I), Mary J. Lowery, M.A. (I)

202 Alcoholism Community Outreach Service in Oklahoma
William Blyth, M.D. (I)

203 Interactional Behavior in an Alcoholic Community
Steven Wolin, M.D. (M), Peter Steinglass, M.D. (M)

204 Androgens and Aggression in Alcohol Addicts
Nancy K. Mello, Ph.D. (I), Jack H. Mendelson, M.D. (F)

205 Alcohol Sensitivity and Ethnic Background
John A. Ewing, M.D. (F), Beatrice A. Rouse, M.Ed. (I)

Session IV: Schizophrenia

206 On Trends in the Diagnosis of Schizophrenia
Judith B. Kuriansky, Ed.M. (I), W. Edwards Deming, Ph.D. (I), Barry J. Gurland, M.B. (I)

207 Schizophrenia: Major and Minor Criteria
Alvin S. Yusin, M.D. (M), Kazuo Nihira, Ph.D. (I), Clement Mortashed, M.D. (M)

208 Primary Process Thinking and Schizophrenia
Martin Harrow, Ph.D. (I), Donald Quinlan, Ph.D. (I)

209 Pleasure-Deficit in Nonpsychotic Schizophrenics
Lawrence Kayton, M.D. (M), Soon D. Koh, Ph.D. (I)

210 Styles of Stimulus Processing and Schizophrenia
Gordon I. Kuster, M.D. (MT), Martin Harrow, Ph.D. (I), Gary J. Tucker, M.D. (M)

211 Sensorimotor Functions and Cognitive Disturbance
Edward W. Campion (I), Patrick A. Kelleher (I), Peter M. Silberfarb, M.D. (MT), Gary J. Tucker, M.D. (M)

Session V: Hospitalization and Its Alternatives

212 Who Goes to the State Hospital Now?
Donald G. Langsley, M.D. (F), Theodore M. Odland, M.D. (M), James T. Barter, M.D. (M), Douglas Moorehead, M.D. (I)

213 Psychiatric Inpatients: Who, Where, and Future
Lucy D. Ozarin, M.D. (F), Carl A. Taube (I)

214 Involuntary Hospitalization: What For and How Long
James Spensley, M.D. (M), James T. Barter, M.D. (F), Donald G. Langsley, M.D. (F), Paul H. Werme, M.A. (I)

215 Alternatives to Commitment
Richard W. Rewey, M.D. (I), Latressa Sternberg, R.N. (I)

216 The Santa Barbara Project
Robert E. Rabe, M.D. (M)

217 The Effect of a CMHC Upon State Hospital Use
George Dyck, M.D. (M)

Session VI: Looking Ahead: Reciprocal Roles for Asian and North American Educators (Joint Sponsorship by the National Institute of Mental Health and the APA Task Force on Foreign Medical Graduates)

218 A View from Japan
L. Takeo Doi, M.D. (I)

219 A View from Indonesia
Kusamonto Setyonegoro, M.D. (I)

220 A View from the Philippines
Baltazar Reyes, M.D. (CF)

221 A View from Malaysia
Eng-Seong Tan, M.D. (I)

Session VII: Sexual Problems

222 Understanding Women Married to Male Homosexuals
Myra S. Hatterer, M.D. (M)

223 Women Who Marry Men Who Were Formerly Women
Richard Green, M.D. (F)

224 Male Nontranssexuals Seeking Sex Reassignment
Lawrence E. Newman, M.D. (M), Robert J. Stoller, M.D. (F)

225 Outcome Study on 39 Exhibitionists
Joseph Steg, M.D. (M), Joseph J. Peters, M.D. (M)

226 Sex Offenders: Personality Traits and Recidivism
James M. Pedigo, M.D. (M), Joseph J. Peters, M.D. (M), Hermann Roether, Ph.D. (I)

227 Etiologies and Psychodynamics of Male Bisexuality
Lawrence J. Hatterer, M.D. (F)

Video Session III: Continuing Education (Videotape Special Session)

12:00 Videotape Effect on Adolescent Societal Attitudes and Behaviors
Participants: Robert C. Marvit, M.D. (M), Dennis G. McLaughlin, M.A. (I), Judy Lind, M.S.W. (I)

1:15 Dying and Bereavement
We're Not Alone
Presented by: Leon N. Shapiro, M.D. (F)

The Physician in the Management of the Dying Patient
Participants: Arthur B. Schuller, M.D. (I), Harold Levine, M.D. (I)

New Research

The sessions on new research are being presented again this year. Additional sessions were held on Tuesday morning, Wednesday afternoon, and Thursday morning. The papers in these sessions will consist of short presentations of recently collected research data. Since every effort was made to include new and exciting data, the papers were submitted after the deadline for printing this program. Consequently, the authors of these papers are not listed here. Program leaflets containing all of the details of the presentations will be available at the registration desk.

THURSDAY, MAY 10 3:00 P.M.

Special Lecture

228 Psychiatric Care in Africa
Tolani Asuni, M.D., D.P.M. (I), Medical Superintendent, the Aro Hospital, Abeokuta, Nigeria

THURSDAY, MAY 10 5:30 P.M.

Evening Panels

AA Depression: An Emergent Public Health Problem
Moderator: Martin M. Katz, Ph.D. (I)
Panelists: James Maas, M.D. (F), Gerald L. Klerman, M.D. (F), Steven Secunda, M.D. (M), Dean Schuyler, M.D. (M), Raymond Friedman, M.D. (M)

BB Problem-Oriented Record and Psychiatry
Moderator: Ralph S. Ryback, M.D. (M)
Panelists: Richard L. Grant, M.D. (M), Ross Grumet, M.D. (M), W.P. Mazur, M.D. (M), Francis P. Kalibat, M.D. (M)

CC Sociopsychiatric Implications of Population Control
Moderators: Jules H. Masserman, M.D. (LF), John J. Schwab, M.D. (F)
Panelists: Roderic Gorney, M.D. (F), Frederick J. Ziegler, M.D. (F), Stephen Fleck, M.D. (F), H. Curtis Wood, Jr., M.D. (I), Erika Freeman, Ph.D. (I)

DD Military Psychiatry: Fact or Fantasy
Moderators: Harvey L. Ruben, M.D. (M), Norman Tamarkin, M.D. (M)
Panelists: Robert J. Lifton, M.D. (F), Douglas Bey, M.D. (A), Henry Friedman, M.D. (M), Peter G. Bourne, M.D. (M), Lt. Col. Frank W. Zimmerman, USAF, MC (I)

EE An Elective Abroad During Residency: Pros and Cons
Moderator: Dennis P. Cantwell, M.D. (M)
Panelists: Sheldon Bloch, M.D. (MT), David Sheffner, M.D. (MT), Ron Thurston, M.D. (MT), Peter Tanguay, M.D. (M), Robert Feldstein, M.D. (M)

FF Child Abuse: New Findings, New Directions
Moderator: Howard Hansen, M.D. (F)
Panelists: Eli Newberger, M.D. (I), George Starbuck, M.D. (I), Joliy K. (I), James Kent, Ph.D. (I), James Apthorp, M.D. (I)

GG Patients' Rights and the Right to Treatment
Moderator: Robert L. Sadoff, M.D. (F)
Panelists: Ames Robey, M.D. (F), Jonas R. Rappeport, M.D. (F), James Thrasher, M.D. (M), Dennis Koson, M.D. (I), Carol Bohmer, LL.M. (I)

HH Current Developments in Electrosleep Therapy
Moderator: Earl D. Heart, M.D. (I)
Panelists: C. Robert Cloninger, M.D. (I), John P. Feighner, M.D. (M), Saul H. Rosenthal, M.D. (M), Rodrigo A. Munoz, M.D. (M)

II Psychiatry's Lack of Responsibility to Medicine
Moderator: Norman B. Levy, M.D. (M)
Panelists: Thomas P. Hackett, M.D. (F), William F. Kiely, M.D. (M), Chase P. Kimball, M.D. (M), Z.J. Lipowski, M.D. (F), Edward J. Sachar, M.D. (M)

JJ Progress in Transcultural Psychiatry
Moderator: Ramon Parres, M.D. (F)
Panelists: Carol Wolman, M.D. (MT), Stanley R. Dean, M.D. (F), Karl J.F. Gossner, M.D. (F), Keith Yonge, M.D. (F), Joe Yamamoto, M.D. (F)

KK The Individual Versus the Group in Group Therapy
Moderator: Donald A. Shaskan, M.D. (LF)
Panelists: Edward L. Pinney, Jr., M.D. (F), Aaron Stein, M.D. (F), Clifford J. Sager, M.D. (F), Hyman Spotnitz, M.D. (LF)

LL A Report from Four Minority Group Mental Health Conferences
Moderator: K. Patrick Okura (I)
Panelists: James Ralph, M.D. (M), Juan Ramos, M.D. (I), David Reisling (I), Jing Hsu, M.D. (M), Larry Koseki (I), Sritham Thanaphum, M.D. (A)

MM Unified Services: Give a Little, Get a Lot?
Moderator: Alvin M. Mesnikoff, M.D. (F)
Panelists: Richard M. Silberstein, M.D. (F), Richard T. Suchinsky, M.D. (F), Manuel Hermida, M.D. (A), Paul Cooper, M.S.W. (I), Stuart L. Keill, M.D. (F)

NN Ethical Issues in the New Sex Education
Moderator: Charles R. Young, M.D. (M)
Panelists: Seymour L. Halleck, M.D. (F), E. Mansell Pattison, M.D. (F), Herbert C. Modlin, M.D. (F), Earl A. Loomis, Jr., M.D. (F), Truman G. Esau, M.D. (M)

OO Mental Health, Psychiatry, and Systems Theory
Moderator: Claudewell S. Thomas, M.D. (F)
Panelists: Boris M. Astrachan, M.D. (M), S. Feldman, D.P.A. (I), H. Halpert, Ph.D. (I), Herzl R. Spiro, M.D. (F), Robert M. Vidaver, M.D. (M)

PP Pacific Basin Psychiatry
Moderator: Frank M. Ochberg, M.D. (M)
Panelists: Robert C. Marvit, M.D. (M), Jack McCants (I), Satoru Izutsu, Ph.D. (I), E.H. Auerswalk, M.D. (M), Frank Haendel, M.D. (M)

QQ Critique and Evaluation of the Therapeutic Community
Moderator: Leo H. Berman, M.D. (F)
Panelists: Marvin I. Herz, M.D. (F), Alan M. Kraft, M.D. (F), Louis B. Fierman, M.D. (F)

RR Recent Research in Schizophrenia: Special Report 1972
Moderator: Loren R. Mosher, M.D. (M)
Panelists: Irwin Feinberg, M.D. (M), Jack Durell, M.D. (F), Leopold Bellak, M.D. (F), Donald L. Burnham, M.D. (F), David Reiss, M.D. (I)

SS How Should We Teach Community Consultation?
Moderator: Allan Z. Schwartzberg, M.D. (F)
Panelists: Irving Schneider, M.D. (F), Alan N. Arnson, M.D. (M), Louis F. Rittelmeyer, M.D. (F)

TT Computerized Psychiatric Information Systems
Moderator: Donald W. Morgan, M.D. (M)
Panelists: Maj. Gregory C. Meyer, M.S.C. (I), Daniel T. Gianturco, M.D. (F), C. Vance Kauzlarich, M.S.I.E., M.S.P.H. (I), James L. Hedlund, Ph.D. (I), Ivan W. Sletten, M.D. (F)

UU Psychosurgical Techniques
Moderator: Edward G. Colbert, M.D. (A)
Panelists: H. Thomas Ballantine, Jr., M.D.(I), Harry R. Bailey, M.D.(I), Evan Davies, Ph.D.(I), Leopold Hofstatter, M.D.(F), M. Hunter Brown, M.D.(I)

VV APA Task Force on Women: Discussion Session
Moderator: Nancy A. Roeske, M.D. (F)
Panelists: Martha Kirkpatrick, M.D. (F), Mary Ann Bartusis, M.D. (F), Anne M. Seiden, M.D. (A), Carol Nadelson, M.D. (M), Leon Eisenberg, M.D. (F)

WW Goals of Medical Student Psychiatric Education
Moderator: Charles L. Bowden, M.D. (M)
Panelists: Lawrence C. Kolb, M.D. (F), Stephen C. Scheiber, M.D. (M), Johnnie L. Gallemore, Jr., M.D. (M), Dan J. Croy, M.D. (M)

XX Family Therapy: A Context Analysis of Don Jackson At Work
Moderator: Andrew Ferber, M.D. (I)
Panelists: Jane Ferber, M.D. (I), John Schoonbeck, Ph.D. (I), C. Christian Beels, M.D. (M)

YY Peace Corps Psychiatry: A Ten-Year History
Moderator: R. Curtis Bristol, M.D. (M)
Panelists: Sidney Werkman, M.D. (F), Arthur Greditzer, M.D. (M), Benjamin Rubenstein, Ph.D. (I), Gene Gordon, M.D. (F), William J. Novak, M.D. (M)

ZZ1 Psychiatry in Genetics: Interdisciplinary Aspects
Moderator: Michael A. Sperber, M.D. (A)
Panelists: J. Silber (I), Alex Capron, LL.B. (I), Albert Morachevski, Ph.D. (I), Lissy F. Jarvik, M.D., Ph.D. (M), Joshua Lederberg, Ph.D. (I)

ZZ2 The Changing Role of Nursing in Psychiatry
Moderator: Abraham Heller, M.D. (M)
Panelists: Sharon Gedan, M.S., R.N. (I), Madeline Leininger, Ph.D., R.N. (I), Fred Kane, M.D. (M)

ZZ3 Art Therapy
Moderator: Paul J. Fink, M.D. (F)
Panelists: Christine E. Sharps, A.T.R. (I), Otto Billig, M.D. (LF), Milton Berger, M.D. (LF), Lynne F. Berger, A.T.R. (I)

FRIDAY, MAY 11 7:00 A.M.

Morning Panels

F1 Impact of Strong Citizen Input on Psychiatric Care
Moderator: Roger Peele, M.D. (M)
Panelists: William M. Bolman, M.D. (M), Hiawatha Harris, M.D. (F), Noland E. Penn, Ph.D. (I), Vivian Smith, M.S.W. (I), Stanley Anderson (I)

F2 Infant Deprivation or Constructive Legislation
Moderator: Mary Elizabeth Remar (I)
Panelists: Bellenden Hutcheson, M.D. (F), Representative Patsy Mink (I), Sarah Woods (I)

F3 Adolescent Sexuality
Moderator: Robert E. Becker, M.D. (M)
Panelists: Robert Cancro, M.D. (F), Robert Steinberg (I), Robert L. Arnstein, M.D. (F), Lorna J. Sarrel, M.S. (I), Philip M. Sarrel, M.D. (I)

F4 What Role for the Psychiatrists?
Moderator: Alvin M. Mesnikoff, M.D. (F)
Panelists: Jack F. Wilder, M.D. (F), Gabriel Koz, M.D. (M), Yoosuf Haveliwala, M.D. (A), Milton Berger, M.D. (LF)

F5 Psychiatry and Race in the Modern South
Moderator: Kim A. Keeley, M.D. (M)
Panelists: John J. Schwab, M.D. (F), Harold W. Jordan, M.D. (A), DeWitt C. Alfred, Jr., M.D. (M), Robert S. McCully, Ph.D. (I), Quinton C. James, M.D. (M)

F6 Psychobiology of Electroconvulsive Therapy
Moderator: Martin Katz, Ph.D. (I)
Panelists: Ferris Pitts, M.D. (F), James McGaugh, Ph.D. (I), Seymour Kety, M.D. (DF), Max Fink, M.D. (F)

F7 Drug Abuse Programs: The National Training System
Moderator: Raymond R. Knowles, M.D. (F)
Panelists: John R. Moore, M.S.W. (I), Tom Carroll, Ph.D. (I), Richard Phillipson, M.D. (I), Vincent Nowlis, Ph.D. (I), Helen Nowlis, Ph.D. (I)

F8 Identifying the Drunk Driver
Moderator: Richard Rada, M.D. (M)
Panelists: Robert A. Moore, M.D. (F), Melvin L. Selzer, M.D. (F), Samuel B. Guze, M.D. (F)

F9 Higher Unit Dosage of Psychotropic Drugs
Moderator: F.S. Abuzzahab, Sr., M.D., Ph.D. (F)
Panelists: Barrett Scoville (I), John M. Davis, M.D. (M), Maurice R. Nance, M.D. (I)

F10 Psychiatry in Southeast Asia: Changing Concepts
Moderator: Gerald J. McKenna, M.D. (I)
Panelists: Ray Fidaleo, M.D. (M), E. Samuel Rofman, M.D. (M), Jonathan Lee, M.D. (MT), John A. Talbott, M.D. (F), Peter G. Bourne, M.D. (M)

F11 Behavioral Factors in Aviation Safety
Moderator: Daniel A. Grabski, M.D. (F)
Panelists: Nolen L. Armstrong, M.D. (M), George I. LeBaron, Jr., M.D. (F), Richard C. Schaeffer, M.D. (I)

F12 Recovery's Cooperation with Professionals
Moderator: Hanus J. Grosz, M.D. (F)
Panelists: Stanley R. Dean, M.D. (F), Bohdana Salaban, M.D. (F), Herbert L. Rooney, M.S.S.W. (I), Harvey M. Freed, M.D. (M), Earl N. Solon, M.D. (M)

F13 The Ethics and Politics of Psychiatric Technology
Moderator: Peter R. Breggin, M.D. (M)
Panelists: Paul Lowinger, M.D. (F), Jonathan Ecker, M.D. (M)

F14 What Therapies Work with Today's College Students
Moderator: Philippa M. Coughlan, Ph.D. (I)
Panelists: Richard Thurell, M.D. (F), Richard N. Jacks, Ph.D. (I), Ira Rudolph, Ph.D. (I), Jerome A. Winer, M.D. (A), Millard Amdur, M.D. (M)

F15 Community Mental Health Training: Past and Future
Moderator: Farrokh Khajavi, M.D. (M)
Panelists: Jerome Wacks, M.D. (A), Albert Gaw, M.D. (I), Jerome Collins, M.D. (M), Joseph Colligan, M.D. (I)

F16 Psychiatric Services to Ethnic Minority Groups
Moderator: Michael A. Woodbury, M.D. (F)
Panelists: Joseph D. Bloom, M.D. (M), Robert L. Bergman, M.D. (I), S. Eugene Long, M.D. (M), Pedro Ruiz, M.D. (A), William J.T. Cody, M.D. (F)

F17 Jungian Psychology in the 1970s
Moderator: Harry A. Wilmer, M.D. (F)
Panelists: James Hall, M.D. (I), John Perry, M.D. (I), Joseph Wheelwright, M.D. (F)

F18 Assessing Motivation in Medical School Applicants
Moderator: John M. Rhoads, M.D. (F)
Panelists: Suydam Osterhout, M.D. (I), James D. Jones, M.D. (F), Daniel T. Gianturco, M.D. (M), Johnnie L. Gallemore, Jr., M.D. (M)

F19 Suicide and Self-Mutilation in Prison
Moderator: George Bach-y-Rita, M.D. (M)
Panelists: Joel Albert, M.D. (MT), Lino Covi, M.D. (M), Russell R. Monroe, M.D. (F), John R. Lion, M.D. (M)

F20 Transcultural Aspects of the Use and Abuse of Drugs
Moderator: Howard P. Rome, M.D. (F)
Panelists: Jack H. Mendelson, M.D. (F), Reginald Smart, Ph.D. (I), Guido Belsasso, M.D. (M), Jean P. Smith, Ph.S. (I)

F21 Mental Health Coverage Under National Health Insurance
Moderator: Milton Greenblatt, M.D. (F)
Panelists: Warren Williams, M.D. (F), Scott H. Nelson, M.D. (M), Robert L. Taylor, M.D. (M), Robert Gibson, M.D. (F)

F22 Psychiatrist-Wife-Mother: Is Serenity Possible?
Moderator: Maryonda Scher, M.D. (F)
Panelists: Elissa Benedek, M.D. (F), Ardis Candy, M.D. (M), Kira Carey, M.D. (I), Bernice Sachs, M.D. (M), Janet Mules, M.D. (I)

FRIDAY, MAY 11 8:30 A.M.

Films IV: Members' Film Theater*

F11 Control of Hyperkinetic and Violent Behavior in Dogs

F12 Diagnosis of Drug Dependence with Naloxone

F13 The Diagnostic Interview in Child Psychiatry

F14 About Sex

F15 Relax and Enjoy It

F16 The Use of Video Replay in Group Psychotherapy

F17 Geel Foster Family Care: 1470–1970

* This session continues until 12:00 p.m.

FRIDAY, MAY 11 9:00 A.M.

Session I: Studies of Individuals at Risk for Schizophrenia

229 Electrophysiologic Studies of High-Risk Children
Turan M. Itil, M.D. (M)

230 A Risk Vulnerability-Intervention Model in Operation
E. James Anthony, M.D. (F)

231 Families in Which Schizophrenia Occurs
Michael J. Goldstein, Ph.D. (I)

232 Children of Deviants
Dorothy L. Miller, D.S.W. (I)

Session II: Depression

233 Effects of Cocaine in Depressed Patients
Robert M. Post, M.D. (MT), Joel Kotin, M.D. (MT), Frederick K. Goodwin, M.D. (M)

234 Ego-Defense Patterns in Manic-Depressive Illness
Steven L. Ablon, M.D. (M), Gabrielle A. Carlson, M.D. (I), Frederick K. Goodwin, M.D. (M)

235 Psychotic Depression and Hallucinations
J. Richard Ciccone, M.D. (I), John Racy, M.D. (M)

236 Thought Disorder in Depression
Benjamin M. Ianzito, M.D. (MT), Remi J. Cadoret, M.D. (M), Daniel D. Pugh, M.D. (M)

237 Divorce, Bereavement, and Depression
C. William Briscoe, M.D. (MT), James B. Smith, M.D. (I)

Session III: Treatments of Heroin Addiction

238 Methadone Self-Withdrawal

S. Parwatikar, M.D. (A), Raymond R. Knowles, M.D. (F), H. Angle, Ph.D. (I)

239 Psychodynamics in Methadone Maintenance
Leon Wurmser, M.D. (F), Willem G.A. Bosma, M.D. (M)

240 Methadone Maintenance and Crime Reduction in Boston
Vernon D. Patch, M.D. (F), Anthony E. Raynes, M.D. (I), Alan Fisch, M.D. (M)

241 Duration of Action of Levomethadyl
Robert Levine, M.D. (M), Arthur Zaks, M.D. (M), Max Fink, M.D. (F), Alfred M. Freedman, M.D. (F)

242 High-Dose Cyclazocine Therapy of Opiate Dependence
Richard B. Resnick, M.D. (A), Max Fink, M.D. (F), Alfred M. Freedman, M.D. (F)

Session IV: Psychopathology I

243 Hysteria and Parental Psychiatric Illness
C. Robert Cloninger, M.D. (MT), Samuel B. Guze, M.D. (F).

244 Introjective Mechanisms in the Paranoid Process
W.W. Meissner, M.D. (M)

245 The Borderline Syndrome: An Operational Definition
Allan B. Willett, M.D. (MT), Franklin D. Jones, M.D. (M), Donald W. Morgan, M.D. (M), Sinai I. Frenkel, Ph.D. (I)

246 Interpersonal Maneuvers of Manic Patients
M. Khaled El-Yousef, M.D. (M), David S. Janowsky, M.D. (M), John M. Davis, M.D. (M)

247 The Natural History of Female Transsexualism
Ira B. Pauly, M.D. (F)

248 A Study of Male Potency Disorders in India
B.R.S. Nakra, M.D. (I), N.N. Wig, M.D. (I), V.K. Varma, M.B. (CF)

Session V: Therapeutic and Antitherapeutic Milieu

249 Dimensions of the Therapeutic Milieu
Lee Gurel, Ph.D. (I)

250 An Egalitarian Model for Inpatient Management
Mark J. Blotcky, M.D. (MT), Donald N. Offutt, M.D. (M), Robert W. Hagebak, Ph.D. (I), Robert P. Stewart, M.S.S.W. (I)

251 Implications of a Changing Hospital Population
Lewis L. Robbins, M.D. (LF)

252 Termination and Transfer in a Psychiatric Hospital
David A. Berkowitz, M.D. (I)

253 On the Stanton-Schwartz "Syndrome"
Herman C.B. Denber, M.D. (F)

254 Seclusion Room: Its Role in Psychiatric Practice
Robert Plutchik, Ph.D. (I), Byram T. Karasu, M.D. (M), Barbara Siegel (I), Hope R. Conte, M.A. (I)

Session VI: Eskimo Psychiatry

255 Eskimo Perception of Psychopathological Behavior
Hugh M. Sampath, M.D. (M)

256 The Arctic Hysterias and the Calcium Hypothesis
Edward F. Foulks, M.D. (M)

257 Eskimo Suicidal Behavior
Robert F. Kraus, M.D. (M)

258 Augumangia-Ukamiarik: Eskimo Sleep Paralysis
Joseph D. Bloom, M.D. (M), Richard D. Gelardin, M.Ed. (I)

Session VII: Psychiatry of the Future: Training Now?

259 New Directions in Residency Training: A Yale Model

Leonard S. Zegans, M.D. (M), Morton F. Reiser, M.D. (LF)

260 The Developmental-Adaptational Approach to Residency Training
Robert Cancro, M.D. (F), Robert E. Becker, M.D. (M), James Stabenau, M.D. (F)

261 Psychiatric Residency Education in the 60s and 70s
Edgar Draper, M.D. (F)

262 Changes in Medical Education: Implications for Revisions in Residency Training
Carl Eisdorfer, M.D. (M)

FRIDAY, MAY 11 1:00 P.M.

Session I: Stimulants in Hyperkinesis and Schizophrenia

263 Methylphenidate Effects in Learning Disability in Children
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Evening Panels. Evening panels are designated by the following abbreviations: either a single letter for panels on Tuesday evening or double letters for panels on Thursday evening. Thus the abbreviation "B" refers to a panel on Tuesday evening, and the abbreviation "BB" refers to a panel on Thursday evening. Since there are a greater number of evening panels than there are letters in the alphabet, numbers will follow the designations "Z" and "ZZ" for panels on Tuesday and Thursday evenings, respectively. The abbreviations "Z1" and "ZZ3" (for example) are not to be confused with the abbreviations for morning panels.

Video Sessions. The program contains three video sessions, one each on Monday afternoon, Wednesday morning, and Thursday afternoon. These are designated by the following abbreviations: either the letter "M" (Monday), "W" (Wednesday), or "Th" (Thursday), followed by "A" or "P" (for a.m. or p.m., respectively), followed by the video session number. Thus "M/P/Video I" refers to Video Session I on Monday afternoon.

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Advance Registration

ADVANCE REGISTRATION is again available to all APA members and their spouses free of charge.

STUDENTS AND RESIDENTS in the mental health field and their spouses may register in advance. A registration fee of $5 for each person must accompany the advance registration form. Please have your director sign this application form, certifying your status as a student. Please complete the form below and return it to this office, together with your check, not later than Saturday, March 31, 1973. Submit one form for each member. Request additional copies from the Convention Office of the APA.

ADVANCE REGISTRATION FORM

RETURN IMMEDIATELY TO:

Convention Office
American Psychiatric Association
1700 Eighteenth Street, N.W.
Washington, D.C. 20009

Students/Residents
check here:
☐

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

In order to receive your Advance Registration in the mail, this form must be received not later than Saturday, March 31, 1973.

If your spouse wishes to register in advance, please print name as it should appear on badge.

NAME _____

I hereby certify that the above named is a student/resident in my training program.

_____
(signature)

_____
(institution)

Reservations

Make all checks payable to "TCI-APA ANNUAL MEETING ACCOUNT" and send required payments and this form to: APA Coordination Center, 1025 Connecticut Avenue, N.W., Washington, D.C. 20036; telephone (202) 569-9555. This reservation form will not be processed unless advance hotel deposit is attached.

RESERVATIONS FORM

1. MAILING ADDRESS (Immediate family should be included on same form with registrant. Others should submit separate form.)

LAST NAME _____

AFFILIATION _____

STREET ADDRESS _____

CITY, STATE, ZIP CODE _____

SPOUSE'S FIRST NAME (if accompanying) _____

CHILDREN'S NAME(S) AND AGE(S) (if accompanying) _____

Accompanying family members who are not residing in the same household should submit a separate form.

2. HONOLULU HOTEL ACCOMMODATIONS (Waikiki Beach Area). An advance deposit of $50 per room is required. Failure to indicate three choices of hotel may delay confirmation. If accommodations are not available at any of the hotels selected, the Coordination Center will make your reservation at another suitable hotel.

A. My first three choices of hotel are:

(Please check rate category for each hotel choice.)

	Standard	Medium	Superior	Deluxe
1. _____	☐	☐	☐	☐
2. _____	☐	☐	☐	☐
3. _____	☐	☐	☐	☐

B. Confirm for my arrival on _____ (date) and departure on _____ (date).

C. Please reserve ☐ single ☐ twin ☐ triple (roll-away bed) room(s).
(Indicate number in box if more than one room.)

D. Please reserve ☐ parlor and 1 bedroom. ☐ parlor and 2 bedrooms.

ACCOMMODATIONS

Hotel	Standard		Medium		Superior		Deluxe	
	Twin	Single	Twin	Single	Twin	Single	Twin	Single
Ala Moana[1, 2, 3]	20.00	18.00	23.00	21.00	26.00	24.00		
Breakers[3]	20.00	18.00						
Coral Reef[2, 3]	17.00	14.00						
Halekulani[3]	24.00	22.00	32.00	30.00	36.00	34.00	40.00	38.00
Hawaiian Inn[2, 3]	14.00	12.00	16.00	14.00	26.00	20.00		
Hilton Hawaiian Village[1, 2, 3]	21.00	19.00	23.00	21.00	29.00	27.00	35.00	33.00
Holiday Inn-Waikiki[2, 3]	22.00	15.00	25.00	15.00	29.00	22.00		
Holiday Isle[3]	18.00	16.00						
Ilikai[1, 2, 3]			23.00	20.00	25.00	22.00	30.00	27.00
Kahala Hilton[1, 2, 3]							34.00	32.00
Moana[2]	18.00	15.00	21.00	18.00	24.00	21.00	34.00	31.00
Outrigger[1, 3]					28.00	26.00	34.00	32.00
Outrigger East[3]	16.00	14.00	18.00	16.00				
Park Shore[3]			23.00	21.00				
Princess Kaiulani[2, 3]	18.00	18.00	22.00	22.00				
Queen Kapiolani	18.00	14.00						
Reef[2]			21.00	18.00				
Reef Tower[2]	16.00	13.00						
Royal Hawaiian[1, 2, 3]					31.00	28.00	38.00	35.00
Sheraton-Waikiki[1, 2, 3]	25.00	22.00	28.00	25.00	35.00	32.00	39.00	36.00
Surfrider[1, 2, 3]			28.00	25.00	32.00	29.00	36.00	33.00
Travelodge[1, 2, 3]	21.00	18.00						
Waikiki Beachcomber[3]	22.00	20.00						

[1]Indicates that suites are available. Rates for parlor and one bedroom suites range from $40–110. Rates for parlor and two bedroom suites range from $55–125.
[2]Indicates that a Family Plan is available.
[3]Indicates that all rooms are air-conditioned.

Leisure Time Program

With approximately 12,000 persons expected to be in attendance in Honolulu, we suggest that advance reservations for these events will offer a considerable convenience due to limited capacities, as compared to arranging such activities after your arrival in Honolulu. Based on receipt of the form below, each event will be reserved in advance and tickets will be mailed to you upon receipt of payment. Complete the form below and mail together with your check in the appropriate amount payable to: "TRAVEL CONSULTANTS, INC." Please address the envelope to: "TRADE WIND TOURS; APA Coordinator," P.O. Box 2198, Honolulu, Hawaii 96805.

RESERVATIONS FORM FOR LEISURE TIME ACTIVITIES

			Number		Cost per Person		
Day	Activity	Time	Adults	Children	Adults	Children under 12	Total Cost
Monday, May 7	House & Garden Tour	1–4:30 p.m.	_____	_____	$ 6.00	$ 6.00	_____
Tuesday, May 8	Arts & Crafts in Hawaii	9–12:00 noon	_____	_____	3.00	3.00	_____
	An Evening at Sea Life Park (admission, dinner, entertainment, transportation)	6–10:30 p.m.	_____	_____	12.00	12.00	_____
Wednesday, May 9	Monarchy Promenade Tour (walking tour)	9–12:00 noon	_____	_____	6.00	6.00	_____
	Hawaiian Banquet & Pageant (cocktails, dinner, entertainment)		_____	—	20.00	—	_____
	Golf at Makaha (green fee, cart, lunch, transportation)		_____	—	35.00	—	_____
Thursday, May 10	200 Years of Hawaiian Fashion (luncheon and fashion show)	11:30–2:00 p.m.	_____	_____	8.00	8.00	_____
Optional Sightseeing Tours (All prices based on deluxe motorcoach transportation.)							
Every day except Sunday	An Afternoon and Evening at Polynesian Cultural Center	1:30 p.m.	_____	_____	20.00	10.00	_____
Daily	Circle Island Tour	9:00 a.m.	_____	_____	11.00	5.50	_____
Daily	City/Punchbowl Tour	8:30 a.m.	_____	_____	7.00	3.50	_____
Daily	Pearl Harbor Cruise	8:45 a.m. and 12:45 p.m.	_____	_____	9.50	4.75	_____

Daily	Deep Sea Fishing Charter All-day charter: includes lunches and beverages Half-day charter: includes beverages (Maximum: six persons per boat)	7:00 a.m.				$209.90 126.50	_____ _____
Monday, May 7	A Night in the Philippines	6:30 p.m.	_____	_____	$13.50	$11.50	_____
Thursday, May 10	Polynesian Water Ballet	6:00 p.m.	_____	_____	13.50	11.50	_____
	HATS, All Island Tour Approximate weight: _____						

Total Enclosed $_____

NAME _____ APA FILE # _____

ADDRESS _____

CITY _____ STATE _____ ZIP CODE _____

WAIKIKI HOTEL WHERE YOU WILL BE STAYING ON DAYS OF TOURS _____

DATE OF ARRIVAL AND FLIGHT NUMBER _____

Position Statement on Peer Review in Psychiatry

This statement was approved by the Board of Trustees of the American Psychiatric Association at its December 8–9, 1972, meeting, upon recommendation of the Council on Mental Health Services. It was prepared by the Task Force on Peer Review in Psychiatry.[1]

> Medicine is not a science but a learned profession deeply rooted in a number of sciences and charged with the obligation to apply them for man's benefit. Traditionally this applying is made with compassion and in accord with a widely recognized moral and ethical code. Thus the responsibilities of medicine: to generate scientific knowledge and to teach it to others; to use the knowledge for the health of an individual or a whole community; and to judge the moral and ethical propriety of each medical act that directly affects another human being (1, p. 1).

PEER REVIEW is the pursuit and maintenance of this tradition. Unless physicians maintain open, frank, critical, and yet constructive self-examination, the review of medical procedures and practices will fall to the vast array of eager, but less qualified, public inspectors (2, 3): "What society [the public] has given society can also take away; namely . . . [medicine's] delegated privilege of regulating itself as a profession" (4).

There is a crisis in demands for quality and cost control in all phases of health care delivery. The crisis is particularly acute in relation to cost, quality, availability, and delivery of psychiatric services.

Concurrently a need is developing for effective psychiatric representation in the existing peer review process. The usual variations in accepted treatment practices that are known to occur in the course of individualized treatment programs are being brought into question by nonpsychiatric and at times nonmedical review. The clinician's flexibility in choosing treatment procedures requires effective peer representation on review committees in order to support continuing freedom and flexibility of practice.

The urgent need for positive, effective action on the part of organized psychiatry requires leadership by APA in promoting the development of peer review organizations in each district branch and at the national level. A mechanism for the implementation of this binary approach is described in the guidelines that appear later in this statement.

The goal of peer review is to *improve the quality of care through the continuing education of physicians, other providers, and patients in the methods for providing and for receiving better care at a minimum feasible cost consistent with high-quality care.* Therefore, peer review cannot be a static program with set standards. Although disciplinary measures or sanctions may be a *necessary* aspect of peer review, the *hope of effecting improved patient care lies in the educational thrust.*

A pervading concept among psychiatrists is that our current criteria for diagnosis, treatment, and determination of recovery vary so widely among individual practitioners and clinic and hospital groups that their standardization for general medical review seems impossible. Some psychiatrists recommend that peer review for psychiatric care be developed separately from the general medical review process. The philosophy of this approach is based on the principle that *quality health care for each individual patient is the primary concern.* The availability, utilization, cost, and quality of care *rendered by each individual practitioner can only be reviewed within the framework of quality health care for the total person.* Specialized approaches to health care, such as psychiatric diagnosis and treatment, are primarily the concern of the general medical community and should be reviewed at that level.

Specialty review is designed to assist, clarify, and represent a specialized viewpoint in the review process. The specialty review committee is a specialized resource available to the general medical review process and provides representation for the specialty practitioner whose services are being reviewed.

The concept of consumer review is being widely promoted both in Congress and throughout the country. *The peer review process is viewed as a basic strength that undergirds the structure of quality health care and that vitalizes the structure of the review process in such a manner that effective communication with consumer review is potentially available. There can be no effective consumer review without a readily available and effectively functioning peer review mechanism within the structure of the health care delivery system to maintain a live communication of knowledge, experience, and direction.*

IMPLEMENTATION OF GUIDELINES

Experience with the actual review process as it develops throughout the country will provide the best test of the capacity of psychiatrists to function within the mainstream of medicine in reviewing, as one phase of health care for our citizens, professional practice in the delivery of psychiatric services.

District branch peer review organizations should take an active and continuing role in consulting with the local medical peer review organization and with third-party carriers regarding the unique problems of standardizing criteria for review relating to all phases of psychiatric practice.

Continuing feedback to the district branch membership of peer review experience, decisions, and accompanying changes in practice is the basic, primary, and essential element in developing a viable peer review organization in a district branch.

Implementation of the recommendations of the APA Task Force on Peer Review is a practical necessity for effective peer review in the Association. There is a current need for *staff coordination* both to accumulate the rapidly developing information

[1] The task force included Rives Chalmers, M.D., chairman, Theodore W. Neumann, M.D., W.A. Cantrell, M.D., S.B. Black, M.D., W. Dever Kehne, M.D., Frank Sullivan, M.D., and Burton Goldstein, M.D.

from present district branch activity in peer review and to formalize relationships with third-party carriers such as Blue Cross, Blue Shield, commercial insurance companies, Medicaid, Medicare, CHAMPUS, the Federal Employees Health Benefits Program, etc.

To this end APA proposes a study, which, if funded, would cover six lines of activity: 1) study of the organization, functioning, and accomplishments of utilization review committees in private psychiatric hospitals and in general hospitals with psychiatric units. Findings from the hospitals would be checked against third-party payers in the area (Blue Cross plans, Medicare fiscal agents, etc.) as to the value of the hospital utilization committee in reviewing and controlling utilization; 2) study of the methods of utilization review of physicians' services now being used by or proposed by peer review committees of APA district branches; 3) visits to health insurance organizations to discuss problems of coverage of mental conditions and of methods and problems of utilization control; 4) continuation of work with the CHAMPUS program on methods and problems of utilization control; 5) study of problems of utilization control in the Canadian programs of medical insurance; and 6) continued efforts to generate data from Blue Cross and Blue Shield on federal employees in various geographical areas, showing the distribution of claimants who incur charges for psychiatric services under supplemental benefits by the number of visits and the amounts charged. Thus, it will be possible: 1) to monitor on a national basis the experience of institutional utilization committees and district branch peer review systems, 2) to gather the information essential to expand the guiding principles, and 3) to share information on solutions with other district branches encountering similar problems.

While recognizing that the district branch is the primary focus for the development of the continuing peer review process, it is believed that the major objectives of effective peer review organizations can be met only by the strong commitment of staff time and financial resources by the APA Central Office. The functions of the *Committee on Peer Review Organization will require specialized expertise.* There is at present urgent need for communicating experience among district branch peer review committees that already exist. There is also an urgent need for the establishment of effective liaison communication with national health insurance organizations, private insurance companies, and government-supported programs.

APA is already being called upon for advice regarding demonstrated examples of questionable practices. Advice is requested regarding the proper approach to dealing with these practices, as well as a demonstration of effective action on the part of American psychiatry to provide mechanisms of self-regulation to maintain high standards of psychiatric service.

Public confidence is basic to peer review. Our psychiatric and medical colleagues share our concern for an effectively functioning peer review process. Our attention to the maintenance of public confidence and our responsible awareness regarding the position of third-party payers, both tax-supported and privately funded, can establish a climate of cooperation in effecting the delivery of mental health services.

COST AND FUNDING

Aggressive promotion, coordination, and direction of the ongoing program of peer review may be an item of expense.

Planning and development in each district branch may demonstrate the need for some kind of ongoing staff service. Certainly, effective and continuing peer review will constitute a major demand on the professional time and energy of those members assigned to peer review organizations. *The educational objectives of peer review organizations will depend on attracting the services of psychiatrist members of the district branches who are most respected for their responsibility, fairness, and conscientious, ethical practice of our profession.* There are persons who already have demanding requirements within their work; provision for reasonable compensation for the professional time required of them will greatly strengthen the continuing quality and effectiveness of peer review organizations.

An early priority of each APA peer review committee should be the exploration of available financing and the development of a policy regarding the use of outside financing in program operation at the district branch and national levels. Psychiatry, the federal government, health insurers, and the consumer public should share in the cost of peer review programs.

GUIDELINES FOR PEER REVIEW IN PSYCHIATRY

Peer review is a mechanism of self-evaluation to maintain the quality of professional services. It is a means by which colleagues review, in a cooperative way, the quantity, quality, and cost of medical services. It thereby subsumes in its responsibility those functions which have been previously designated as claims review, utilization review, and quality review (medical audit) (2,5).

A binary program should be established by APA: 1) a regional peer review organization functioning within each district branch, and 2) a standing APA Committee on Peer Review Organization.

The Local Peer Review Organization

Each APA district branch should establish a peer review organization. It is noted that each district branch was, in fact, instructed by the Assembly of District Branches to submit its plan for peer review in writing by April 1, 1973. Further, the Assembly, following discussion by its area councils, stated that district branch peer review committees should be involved in the whole national mechanism of peer review and that peer review and continuing education are inexorably connected and should be considered as such for planning purposes. Each district branch, therefore, is expected to have a peer review organization. Such an organization should be made up of at least three knowledgeable members who represent varied experiences and approaches to the practice of psychiatry. The general membership should participate as broadly as possible in the process of selecting peer review committees, whether by appointment or by election. To assure a balance between continuity of experience and diversity of representation it is recommended that terms of services on the committee be staggered and that some limitation be placed on reappointment.

Provision should be made for an addition to the district branch or society by-laws that authorizes the peer review organization to function as a consultant to all interested parties regarding questions of fees, utilization, and quality of care related to the practice of psychiatry. Each organization should make its presence known to the appropriate APA area council, the state medical society, and APA at large.

Peer review organizations will have two functions: 1) as a specialty consultant peer review organization to the broader medical society peer review mechanism (stressing the continuing primary affiliation of psychiatry and medicine), and 2) as the

regional extension of APA's Committee on Peer Review Organization.

If the affiliate state, county, or district medical society has not yet established a peer review mechanism, the psychiatric peer review organization should take the initiative in activating such a mechanism, using as guidelines this document, those provided by the American Medical Association (6), and those of the American Society of Internal Medicine (7). Such a program should be designed to meet the specific needs of the geographical area and should generally provide for the following:

1. A well-defined and broadly publicized input mechanism should be available to physicians, care recipients, and interested third parties on all questions relating to physician-generated services.

2. Such an input mechanism should be the initial review organization, whose function would be to assemble necessary information from all involved parties.

3. The problem should then be presented to a multispecialty state, county, or district medical committee, whose charge would be to investigate, consider, and decide the issue. This decision should be forwarded, within a specified period, through the input organization to all involved parties.

4. The psychiatric peer review organization, as well as organizations representing the other medical specialties, should be available as a consultant to the aforementioned medical society organizations. They should also be available to provide expert advice to all interested parties on matters involving the respective specialty practice.

5. A well-defined appeals procedure should be established so that disagreement over decisions can be submitted to a multispecialty appeals organization and, as may be found necessary on occasion, through the highest medical authority within the region to the appropriate judicial court.

6. Specific legal safeguards should be established as an integral feature of the peer review mechanism (5, 6):

Confidentiality. The process of peer review should be conducted in such a manner that the individual (agency) whose services are being reviewed, and the involved recipient of care, have full protection of their rights to confidentiality. Under no circumstances should the data be duplicated and recorded elsewhere or made available to groups that are not connected with the treatment situation. The data should be used only to facilitate the treatment process (8).

Immunity from litigation. Physicians participating in the organizations should be provided with adequate legal protection against suits instituted by participants who are dissatisfied with the review process or decision. An opinion should be obtained from competent legal counsel in each state concerning the liability of physicians serving on these committees (9).

Protection from discovery. The decisions and records of the organization's proceedings should be adequately safeguarded so that they cannot be used against either the members of the organization or the physician (agency) whose services are being reviewed.

7. Review procedures should be standardized, guidelines should be developed, and policy manuals should be established and made available to the providers of service and third-party carriers (6, 7, 10). It is believed that this standardization of procedures and placing the decision-making responsibility within the purview of a multispecialty medical society organization will increase the objectivity of the peer review mechanism.

The APA Committee on Peer Review Organization

Purpose and Organization. The maturation of the local peer review organizations and the success of a meaningful and comprehensive peer review mechanism will depend on the development of three major programs that are integrated on the national and local levels: 1) an automated system for the collection, identification, dissemination, and storage of data, with a broadly available retrieval system (6, 7); 2) a research structure to provide exploration into problem areas as they are delineated: and 3) an educational program designed to effectively return accumulated information to the physician, the recipient of care, and third-party carriers (11).

It is envisaged that these programs fall within the purview of a Committee on Peer Review Organization that would be established by APA. Members of this committee should include psychiatrists who are well versed in data collection, research, and postgraduate education, as well as psychiatrists who are actively engaged in the various clinical applications of psychiatry.

The development of an automated system for data collection is planned as a phase to follow the research exploration of problem areas as they develop. The research studies, when funded, should serve as a monitoring mechanism in collecting difficult case examples for definitive study that may in turn lead to the formulation of disorder-oriented guidelines to quality treatment. It is noted that the APA Task Force on Peer Review suggests a single committee on peer review organizations to accomplish these objectives (data collection, research, and postgraduate education), but since they are quite different problems, it will remain for the Reference Committee of the Board of Trustees to study the recommendations carefully and to consider other options in order to realize their essential goals.

Through the above programs, the committee will strive to expand the expertise of the local peer review organization while depending on it for data collection, collaboration in designated research projects, and carrying out the eventual educational projects.

Broadening peer review to include assessment of the complete spectrum of physician-generated psychiatric care must initially be limited in scope, entering first those areas which render themselves most readily to definition and measurement, but rapidly expanding as experience is gained and as operational techniques are perfected.

Major Objectives. The major objectives of the Committee on Peer Review Organization follow:

- Education of the physician: Psychiatrists, like most practicing physicians, rarely communicate with each other regarding the day-to-day realities of practice experiences. The process of peer review will become an effective mechanism for communicating standards of quality, availability and utilization of services, and usual concepts of fees prevailing in the medical community. Communications regarding actual practice will provide a new and significant dimension of continuing educational experience for all parties involved in medical care and in methods of improving the quality of care.

- Evaluation of quality: It is within this area that continuing feedback through a viable and accepted educational program will determine the usefulness of any information gathered. Without the return of information to the provider of psychiatric care there can be no expectation of change. Consideration must be given not only to the evaluation of an educational device, but also to the study of a system revision that will lend itself to measurement, evaluation, and follow-up (12). The attempt to define the level of patient care and the effectiveness of such care must

be based on a system of record keeping that lends itself to audit (13–18).

Once such a base has been established the quality of psychiatric care may then be divided into three major areas for study and elaboration—structure, process, and outcome of treatment (19). *Structure* would include clarifying the qualifications of psychiatrists and paramedical personnel, working together or separately, and defining the terms and treatment modalities (with guidelines of usual patterns, structure, setting, duration, frequency, etc.). *Process* evaluation would involve assessing the practice of psychiatry through comparisons of observed behavior (empirical quality standards based on actual practice) or through sampled medical records with predetermined standards (normative quality standards based on textbooks, psychiatric records, etc.) (12–15, 19). The evaluation of *outcome* would take place at at least three levels: 1) the effectiveness of treatment by an individual or of a specific modality through medical audit, 2) the changes in patient care following dissemination of information to physicians through a well-organized patient-oriented educational program, and 3) a continuing evaluative program measuring the effectiveness of peer review/educational impact.

• Evaluation of cost: Information is already available through various third-party payers as to the general fee norms for various treatment modalities within geographical areas. These data should be available at both the local and national levels and, specifically, to those physicians falling outside the norm. Further study should attempt to establish explanations for variations in charges; these should be conveyed to the care recipient and third-party carriers.

• Evaluation of quantity/utilization (11): In this area significant information exists through hospital studies, insurance carriers, governmental agencies, community mental health agencies, and the like (6, 10, 20). This information must be integrated by and accessible to the peer review mechanism before further needs in this area can be determined.

Consideration of the availability of care should include an evaluation of the difficulties encountered by patients attempting to enter the mental health care system, the shortages of psychiatrists and paramedical personnel, and the lack of suitable patient care facilities (6). Information should be gathered regarding the distribution of services by psychiatrists, clinics, and other agencies caring for various demographic groups.

Data should be accumulated regarding the use of a psychiatrist's time, i.e., the hours devoted to patient care, administration, teaching, and supervision. An evaluation of psychiatrists' time in caring for patients must also eventually deal with effective utilization relative to the needs of the patient population. Consideration should be given to therapeutic approaches that shorten treatment time and duration, as well as to methods that increase psychiatrist/patient ratios (e.g., group therapy, use of paramedical personnel, educational programs for nonpsychiatric physicians) without sacrificing the effectiveness or the quality of care. Further, studies should appraise the utilization of psychiatrists' time in "elective" psychotherapy as opposed to treating the functionally impaired patient; guidelines will be needed to establish such a distinction (21). Effective utilization could be further aided by the establishment of guidelines for the functional determination of: 1) the need for treatment, 2) the most appropriate treatment for the specific disability, 3) the projected length of treatment and treatment goals, 4) spot evaluation during the course of treatment, and 5) response to treatment and follow-up of treatment effects(22).

Recommendations for desirable changes should be developed and communicated to the profession, public, and appropriate private and governmental agencies. Recommendations should be made to the public concerning how to obtain psychiatric care when problems of availability occur.

CONCLUSIONS

For a comprehensive peer review mechanism to develop within the specialty of psychiatry there should be a binary program: 1) the consultant role of the local psychiatric society peer review committees that function as part of the related medical society peer review mechanism and are available to physicians, patients, and third parties on all questions relating to the practice of psychiatry; and 2) a collaborative program, established by an APA Committee on Peer Review Organization and the local peer review committees, to actively study the cost, quantity, and quality of psychiatric practice through an evolving system of data collection, research programs, and a viable, acceptable educational program.

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Position Statement on Psychiatrists' Relationships with Nonmedical Mental Health Professionals

This statement was approved by the Board of Trustees of the American Psychiatric Association at its December 8–9, 1972, meeting, upon recommendation of the Task Force on Interprofessional Relations.[1]

WITHIN THE PAST 40 years there has been an increase in public awareness and interest in the field of mental health, as well as a growth of knowledge and services. This has brought about extensions and modifications in the entire pattern of mental health care. A significant accompaniment of these changes and this progress has been the increased participation of nonmedical professionals in the delivery of mental health services to the public.

HISTORICAL PERSPECTIVE

In the last decade of the nineteenth century, the development of psychoanalytic theory shifted the focus of psychiatric inquiry and practice from the organic concept of mental illness to an awareness of the important role played by dynamic psychological factors. This shift led away from largely biologic, nosologic, organic, and symptomatic therapies and custodial care toward an effort to understand and treat the intrapsychic factors contributing to mental illness.

Later insights sharpened awareness of the role of social and cultural factors in the development of mental illness and in its prevention and treatment. Mental hygiene centers, developed in the 1920s and 1930s, employed various health professionals in a "team" approach, and "talking therapy" gained momentum. World War II brought great demands for treatment of psychiatric casualties. After the war, hospitals began to augment their psychiatric staffs by employing other physicians and nonmedical professionals in treatment programs.

Since the 1940s, the "shock" therapies, psychotropic drugs, and the open hospital concept have made possible the more rapid discharge of patients from mental hospitals. Many could be treated without hospitalization or for briefer periods of hospitalization, or in institutions and facilities closer to their homes and families. There has been a significant increase in psychiatrists in private practice. Psychiatric services have been established in hundreds of general hospitals, and the total number of patients treated has increased greatly in a few decades. A significant reduction of resident patients in mental hospitals has occurred each year since 1956. Mental health centers have been expanded, and outpatient follow-up centers and, most recently, a sizable number of comprehensive community health centers have been developed.

The concept of mental illness has been broadened from one in which psychiatry was concerned almost exclusively with psychotic patients (who represented a small percent of the population) to one in which the emphasis has become the commitment of the community's total mental health resources to serving and maintaining the mental health needs of the entire population.

Additional innovations have included day and night hospitals, group psychotherapy, case finding, mobile clinics, "outreach" approaches, behavioral and family therapy, and emphasis on preventive programs, all of which supplement and expand the skills and techniques of diagnosis, treatment, and rehabilitation.

These developments were accompanied by significant innovative legislation. Since 1942 Congress has passed the Vocational Rehabilitation Act, the National Mental Health Act, the act creating the National Institute of Mental Health, the Community Mental Health Centers Act, and acts providing for the Medicare and Medicaid programs. Not only have manpower and treatment facilities been improved by this legislation, but a shift in funding from largely state and private sources to federal and third-party funds has also resulted. Under the emerging concept of the right to treatment, public opinion now appears to support the establishment of new programs for the treatment of alcoholism, drug abuse, mental retardation, and geriatric problems, as well as the involvement of psychiatry in helping reduce crime and violence.

Psychiatry today has changed to new, creative, and even radical theoretical and technical approaches, including innovations in means of delivery of services to supplement those practices which have already proven effective.

The Emerging Role of the Nonmedical Mental Health Professional

Expanded training facilities for psychiatrists initiated by medical schools, public and private hospitals, and government and other agencies have not been able to fully meet the increased demand for skilled manpower. Furthermore, future needs are likely to continue to tax all existing facilities and may even require the creation of new types of institutions and facilities to bridge the gap between supply and demand.

Nonpsychiatric physicians, psychologists, social workers, and nurses have become part of the mental health team; they have made increasingly important contributions. To these must be added the special contributions of others such as occupational therapists, recreational therapists, special educators, chaplains, probation officers, vocational, educational, pastoral, and marital counselors, and all others who are employed in the vast mental health care enterprise.

New roles are being added to existing professions and new groups are emerging such as counselors, assistants, technicians, associates, program graduates, and indigenous helpers in mental health. Nor should we overlook the contributions of legal

[1] The task force includes William W. Zeller, M.D., chairman, Robert S. McKnight, M.D., Robert H. Thrasher, M.D., Abraham N. Franzblau, M.D., Alexander Levine, M.D., George E. Williams, M.D., and Donald F. Moore, M.D.

counsels, cost accountants, statisticians, dieticians, legislators, politicians, sociologists, and others.

The Changing Role of the Psychiatrist

Traditionally, the psychiatrist has been viewed by the public and by himself as the primary professional in the field of mental health. Rapid sociological change as well as excessive demands upon his time and energies for the delivery of mental health services have placed upon him additional roles and functions. He is no longer asked to treat only mental illness in all of its medical aspects; he is also called upon to give expert opinion and advice on a variety of social and community problems, which, by traditional training and experience, he may or may not be familiar with or prepared for.

These additional responsibilities have challenged the traditional role of the psychiatrist as well as the nature of his practice of psychiatry. This, along with the changing roles of the other professions, has resulted in considerable role blurring, which is one of the problems besetting the mental health field.

The Unique Role and Function of a Psychiatrist

The psychiatrist's role and function still remain that of a physician especially trained to administer to the needs of patients suffering from nervous or mental disorders.

The psychiatrist-to-be attends college, generally for four years, majoring in the physical and behavioral sciences, often including psychology and sociology and other liberal arts courses; he graduates with a bachelor's degree.

In the four years [2] of medical school training that follow, his studies embrace such basic sciences as biochemistry, anatomy, pharmacology, and physiology as well as clinical training and experience in surgery, internal medicine, pediatrics, gynecology and obstetrics, neurology, developmental psychology, psychiatry, and other areas of medical practice. He participates as a physician in the entire cycle of human life, suffering, and experience, from prenatal care to death. These are the minimum essentials that prepare him to treat and diagnose human illness—physical, psychological, and emotional—and qualify him for an M.D. degree.

Many physicians then serve as interns in an accredited general hospital. This, for the young physician, is an intensive, full-time working experience with patients; he functions as their physician under the supervision of more experienced colleagues. Subsequently he must pass rigorous examinations in order to become a licensed physician and practice medicine. These examinations are conducted by state medical boards that are accredited on a state or national level.

To become a specialist in psychiatry, the physician must engage in hospital training at a university medical center or an accredited teaching hospital, medical clinic, or other accredited teaching facility, where he serves as a resident psychiatrist for three years. The accredited training facilities for psychiatrists are in turn subjected to periodic review of their standards and procedures by the highest authorities of the profession.

To qualify as a Diplomate in Psychiatry, the candidate must in addition have at least two years of practical experience before becoming eligible to take the written and oral examinations administered by the American Board of Psychiatry and Neurology.

[2] A number of six-year programs combine the college degree and the M.D. degree.

Also, during his entire professional career the psychiatrist is subject to peer review to achieve and maintain staff privileges in the hospitals in which he practices. He is also accountable to the state and local medical societies and state licensure authorities as well as to the ethics committees of the American Psychiatric Association and its district branches.

The psychological and physical components of an illness are intertwined; at any point in the disease process, psychological symptoms may give rise to, substitute for, or run concurrently with physical symptoms; the reverse may also occur. The ability to deal effectively with this phenomenon is an important skill in which the psychiatrist is trained and which influences patient-therapist interaction and the outcome of treatment. His medical training and experience also qualify the psychiatrist to bring to bear upon the process of differential diagnosis not only interviewing techniques, history taking, and the physical examination, but also the findings of other medical examinations including physical, neurological, laboratory, and X-ray. In addition he is trained to recognize the various interpersonal social factors that may cause, influence, or modify emotional or mental disorders.

If hospitalization is required, the psychiatrist as a physician is authorized to admit and discharge patients. He also has the training and experience to select from the entire armamentarium of medical, surgical, and psychiatric modalities a treatment plan appropriate to the particular patient, and he is not limited to the various forms of psychotherapy.

Furthermore, the psychiatrist has the specialized skills and knowledge necessary for the conduct of meaningful and productive research into the origins of mental illness in collaboration with research scientists from other fields, and for making significant contributions to other mental health research.

Interprofessional Relationships

Recent developments in the field of mental health care have created problems for many people—professionals, consumers (patients, clients, parishioners, etc.), governmental regulative agencies, insurance companies, and others involved and responsible for third-party payments and the delivery of mental health services.

Most persons in the professions of psychiatry, psychology, social work, nursing, occupational therapy, vocational rehabilitation, and lately other professions such as religion and the law, have cooperated and collaborated in a positive way for many years. By and large, mental health professionals have worked well together in mental hospitals, psychiatric departments of general hospitals, clinics, mental retardation centers, correctional facilities, rehabilitation and aftercare organizations, schools, social agencies, religious institutions, courts, industry, and, in many instances, private practice. Psychiatry today regards favorably the growing trend to work collaboratively with other physicians and nonmedical professionals in the delivery of many mental health services.

Historically, as psychiatry shifted from care to treatment, the needs for services outran the availability of psychiatric manpower, and psychiatrists began to look to other professionals for assistance. The help of these other professionals was enlisted to provide specialized skills and services in such areas as clinical testing, casework, administration, and basic research; many were also trained to do psychotherapy under psychiatric supervision. The "team approach" care provided by physicians and associated professionals became standard.

Some nonmedical professionals then elected to leave institutional settings and move out into private practice to do clinical testing, casework, and various forms of psychotherapy. In time,

the nonmedical professionals set up training institutions under their own auspices to teach psychotherapy. As the number of these grew, they sought to advance their professional interests and their practices. Clinical psychologists have been especially active in promoting legislation for licensure and certification; such legislation has been passed in almost all of the states. In a number of states, similar legislation has been passed for other professionals.

As the number of independent professional practitioners increased, concern about the maintenance of quality of services to the public was shared by psychiatrists, other physicians, and many leaders of the nonmedical professions. The public has few ways of ascertaining the competence of those who offer them services, except through the safeguards of professional licensing or certifying laws. It is important that all such safeguards be valid if the interests of the public are to be protected.

Some Problems

In the mind of persons seeking help there is confusion over who is best qualified to do psychotherapy. The psychiatric skills in "talking therapy" have a relationship to those utilized by practitioners in other helping professions. Consider the clergyman who counsels a disturbed or distraught parishioner, the lawyer who seeks to reconcile a couple on the verge of divorce, the social worker who strives to knit a family that is shattering, the teacher who assists the potential of a handicapped pupil to blossom; even the trusted family doctor who receives confidences from a troubled patient. There is some similarity between psychotherapy and counseling, consoling, advising, and even just listening sympathetically. But there are also enormous differences; they are by no means interchangeable. The psychiatrist is not only trained to do psychotherapy, he is also trained to make a differential diagnosis, to prescribe medication or somatic therapy, and, if need be, to hospitalize a patient for treatment. The kind of help that each professional offers is dependent upon the background, training, professional attitudes, knowledge, and special skills of the particular professional involved.

Another major problem that the health professions face today is meeting the challenge of a society that has come to the realization that access to health care is a human right in a just society. In these times when health, education, and welfare are considered to be rights for every person, psychiatry by itself can shoulder only a limited portion of this responsibility. The help and cooperation of all professions is essential.

Distribution of health care to all segments of society presents great problems that must be resolved. The Medicare and Medicaid systems for providing funds to pay for health care for the elderly and for certain disadvantaged groups have met part of the problem, but by no means all. Pressure is mounting to provide more care for much larger segments of the population. However, existing mechanisms are proving too inefficient and too costly to allow greater coverage, and even the present coverage is in jeopardy for financial reasons. At the same time, current major mechanisms for financing health care are being challenged as subject to abuse.

There undoubtedly will be much more discussion as to who should participate in health care programs and which groups of professionals will be paid under them. Many of the health care bills currently before Congress do not at this time include provisions for psychiatric services. The psychiatric profession and other mental health professions undoubtedly share concern about this particular aspect of national health care programs.

Active issues such as which professions should have primacy in delivering mental health care, who should be head of the mental health team,[3] who is best qualified to do psychotherapy, or who should be paid by governmental or insurance agencies deserve further attention. However, there should no longer be divisive wedges among professions striving toward the common goal of providing a high-quality, comprehensive, and coordinated system of health care equally accessible to all.

Many questions arise out of the growing borders between the professions involved in mental health care. The American Psychiatric Association has attempted in the document that follows to suggest some relevant and reasonable guidelines for its own membership and for consideration by related nonmedical professions and the public.

OBJECTIVES OF THE PROFESSION OF PSYCHIATRY

The American Psychiatric Association, in its Constitution, states the following to be its objectives:

> (a) to improve the treatment, rehabilitation, and care of the mentally ill, the mentally retarded, and the emotionally disturbed; (b) to promote research, professional education in psychiatry and allied fields, and the prevention of psychiatric disability; (c) to advance the standards of all psychiatric services and facilities; (d) to foster the cooperation of all who are concerned with the medical, psychological, social, and legal aspects of mental health and illness; and (e) to make psychiatric knowledge available to other practitioners of medicine, to scientists in other fields of knowledge, and to the public.

To focus these constitutional objectives on interprofessional relationships, we believe the major responsibilities of psychiatry to the public, to its own members, and to other professions can be better understood by further clarification and delineation.

MAJOR RESPONSIBILITIES OF PSYCHIATRY

Psychiatry's Responsibility to the Public

Public education. To inform the public as to the unique and special services that the psychiatrist, as a physician especially trained in the promotion of mental health and the treatment and prevention of mental and emotional disorders, can render to them. Certain facts should be emphasized and distinguished, namely:

- Psychiatrists are physicians, whereas other mental health professionals are not.
- As such they are trained to make a differential diagnosis between the physical and the emotional aspects of disorders, which are frequently intertwined.
- The treatment of psychiatric disorders involves the use of a wide spectrum of modalities such as psychotherapy, medications, other somatic treatment, and at times hospitalization.
- Delay in the use of such other treatment modalities may have serious or even fatal consequences for some patients.

[3] This issue becomes especially important when it is essential that psychiatry recognize the important contributions that other nonmedical professions have made or are making.

Active participation. To participate actively in developing programs and procedures for the delivery of the highest quality of psychiatric services to all groups of people, determined only by what is appropriate to the needs of each.

Rights of consumers. To recognize the right of recipients of mental health services to be informed regarding the competencies and limitations of all who offer their services and to choose which person, profession, or agency they wish to consult in seeking help.

Development of better laws. To participate in the development of laws to protect the public as recipients of mental health services.

Psychiatry's Responsibility to Members of Its Own Profession

Definition of function. To clarify and define the field of practice, area of special competence, and appropriate spheres of activity of the psychiatric profession.

Education and training. To promote programs of the highest quality for the education and training in psychiatry of medical students, psychiatric residents, and nonpsychiatric physicans, and for the continuing education of psychiatrists to assure the maintenance of high levels of competence in the profession.

Standards of service. To establish and maintain high standards of medical (including psychiatric) patient care.

Ethics. To assure the maintenance of high ethical standards within the psychiatric profession by setting effective methods and techniques of internal control.

Utilization of manpower. To achieve the maximal recruitment and utilization of psychiatric manpower.

Research. To support, encourage, and implement research in psychiatry in both basic and clinical sciences.

Prevention. To work toward the prevention as well as the alleviation of mental illness.

Liaison. To encourage effective liaison among psychiatry, other medical specialties, and nonmedical professionals.

Psychiatry's Responsibilities to Other Professions

Definition and delineation of interprofessional relationships. To recognize that every professional group has a right to establish and maintain its identity and independence by defining its own functions and areas of competence, setting up its own educational and training programs, and establishing its own standards of service. As a responsibility to the public, society may recognize the profession and set up such controls as it may deem necessary. No profession should attempt to define the functions and responsibilities of any other profession.

Education and Training. The responsibilities of psychiatry include the following:

- To inform members of other professions regarding training, experience, areas of special competence, and appropriate spheres of activity of the psychiatrist.
- To assist when invited in the education and training of other professionals in any areas in which psychiatry has a contribution to make, and on subjects within the scope of those other professions as they may be legally defined.
- To encourage and foster ongoing mutual education programs through joint meetings, seminars, and workshops with other professional organizations.

Standards of service. To work in close cooperation with other professionals when requested to do so in order to utilize the expertise of all available professions in the provision of high standards of service to the public.

Ethics. To recognize that the establishment and maintenance of codes of ethics are an internal responsibility of each profession and that complaints against other professionals should be directed to the responsible authorities of the profession concerned.

Manpower, research, and prevention. To collaborate with other professions in these important areas.

Liaison responsibilities. To recognize such responsibilities, the American Psychiatric Association offers the following guidelines in reference to the settings and situations in which problems in interprofessional relations often arise:

- In medical settings: The American Psychiatric Association, in concurrence with the American Hospital Association, endorses the principle of appointing members of other professions such as nurses, dentists, social workers, sociologists, ministers, and psychologists to the staff of hospital and other facilities to bring to the treatment of patients their specialized knowledge, skill, and experience. In such a setting the physician-psychiatrist retains the primary medical responsibility, established by law and custom, for the admission, diagnosis, treatment, rehabilitation, and discharge of patients.
- In nonmedical settings: Psychiatrists function increasingly in many settings such as mental retardation centers, regular and special education schools, correctional institutions, social service agencies, and others that do not have a primarily medical orientation. A psychiatrist working as a consultant, supervisor, therapist, or administrative staff member in such a setting has essentially the same relationship to the organization as other professionals have in a medical setting. However, he must retain ultimate responsibility for the psychiatric and medical care of the patients or clients whom he serves.
- In office practice: The psychiatrist recognizes the special skills and competencies of other professionals and sends or refers people to them for appropriate services, based on the other professional's education, training, experience, competence, and reputation.
- Third-party payments: Psychiatry endorses payment under medical insurance plans such as Medicaid or Medicare to nonmedical health professionals when their services are rendered as part of a plan of treatment that is supervised and/or prescribed by a physician. However, professionals in various allied fields often elect to engage independently in health-related pratices in a nonmedical setting. A person should feel free to select the practitioner of his choice from among qualified professionals. If there is a public demand for health-related services that are not normally regarded as medical or offered as part of a total medical treatment program, insurance companies may offer insurance for such health-related services as they currently do for medical treatment. If the federal government wishes to provide publicly supported programs for such services, appropriate legislation will have to be passed.
- Legal responsibility: When psychiatrists extend their services to other health professionals in meaningful collaboration (which includes supervision of cases or participation in interdisciplinary teamwork), they are obliged to know about and to be willing to assume the established legal responsibilities involved.

CONCLUSIONS

The quality of the relationships among the helping professions will have great bearing upon the success or failure of the mental health programs now functioning or projected in the future. This position statement is offered to help psychiatrists, other physicians, and nonmedical health professionals to meet the obligations and fulfill the potentials of their interprofessional relations and to enhance public understanding.

Position Statement on Homicide Prevention

This statement was approved by the Board of Trustees of the American Psychiatric Association at its December 8–9, 1972, meeting, upon recommendation of the Assembly of District Branches.

IN VIEW OF the increasing violence in our society and the fact that homicide deaths are now a significant contributor to national death rates, comparable to a degree with suicide, war, and vehicle deaths, and

In view of the particular relationships of firearms to homicide and personal injury with the resultant threat to life and security, adding to the fears and stresses in a crowded urban society, and

In view of the peculiar nature of firearms, which are prone to misuse by those with impulsive, explosive, and paranoid personalities as well as by those with criminal propensities and others with defective ego control, and

In view of the need to reinforce individual and group sanctions against the use of violence as a social instrument, behavioral mode, or adaptational pattern as psychiatrists have done with drug abuse, suicidal actions, and antisocial behavior,

BE IT RESOLVED that the American Psychiatric Association recommend that strong controls be placed on the availability of all types of guns and rifles, with particular consideration to a policy of confiscation of hand weapons, but with safeguards for the retention of appropriate weapons by police forces and others who have a clearly defined requirement for the retention of this class of firearms.

Position Statement on Involuntary Hospitalization of the Mentally Ill (Revised)

This statement was originally approved by the Board of Trustees of the American Psychiatric Association on March 3, 1972, upon recommendation of the Committee on Psychiatry and Law.[1] *It was revised by the Board of Trustees at its December 8–9, 1972, meeting, upon recommendation of the Assembly of District Branches. (The sole change consists of an addition to the paragraph numbered 3; the new material is indicated by italics.)*

THE AMERICAN PSYCHIATRIC ASSOCIATION is convinced that most persons who need hospitalization for mental illness can be and should be informally and voluntarily admitted to hospitals in the same manner that hospitalization is afforded for any other illness.

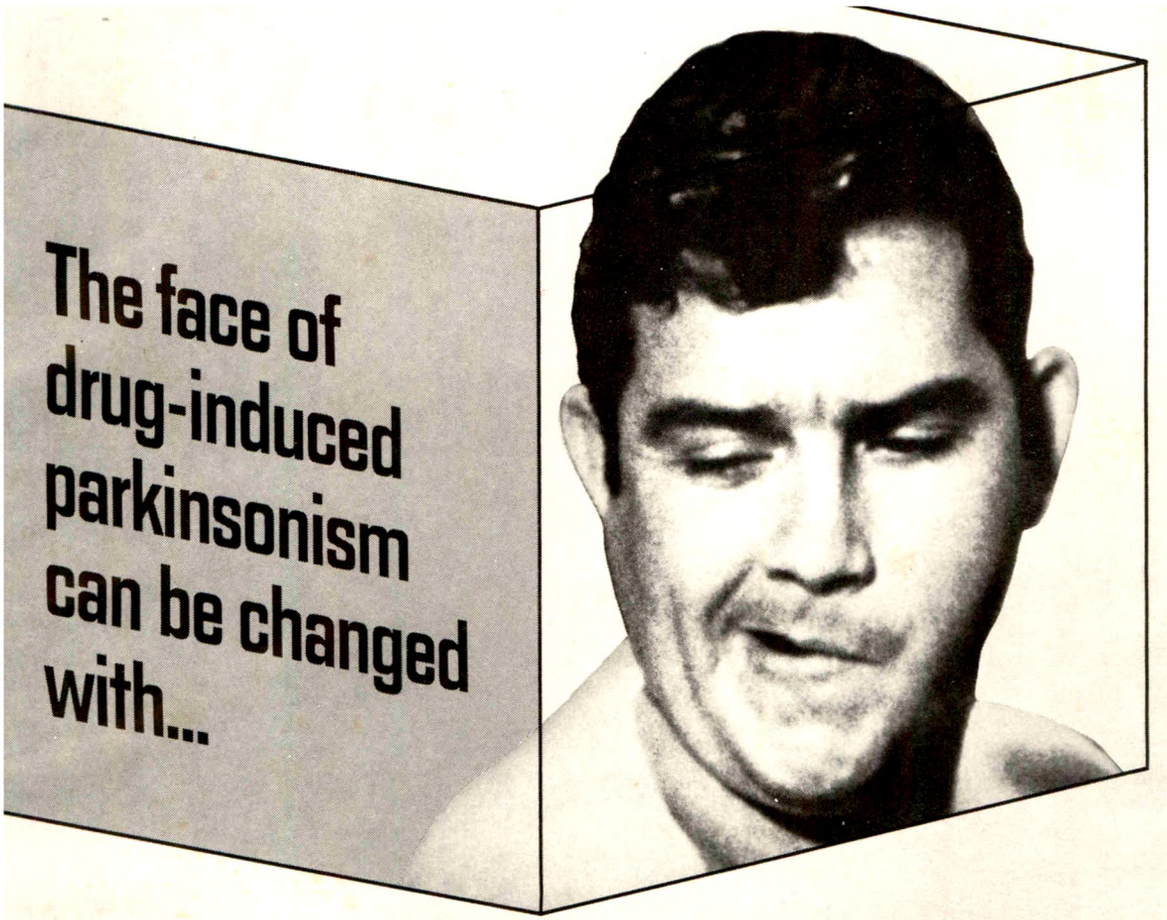
Moreover, modern concepts of psychiatric treatment emphasize the use of community-based outpatient facilities for the treatment and care of the mentally ill who voluntarily seek these services. Psychiatrists attempt to avoid hospitalization to every possible extent, although for some patients a period of hospitalization, usually brief, continues to be the indicated treatment.

Unfortunately, a small percentage of patients who need hospitalization are unable, because of their mental illness, to make a free and informed decision to hospitalize themselves. Their need for and right to treatment in a hospital cannot be ignored. In addition, public policy demands that some form of involuntary hospitalization be available for those mentally ill patients who constitute a danger either to themselves or to others. In such cases, it is a public responsibility to guarantee the right to treatment and to due process. This guarantee can have meaning and substance only if provision is made for proper judicial review, and for appropriate and adequate procedures, treatment facilities, and personnel.

Any form of involuntary hospitalization should provide full rights of due process: all of these rights should be guaranteed the patient regardless of the ability to pay for the services they may entail. It is suggested that these rights encompass the following provisions:

1. That a psychiatric examination and evaluation be made by the hospitalizing physician;
2. That the patient and other parties to the procedure have legal counsel available to them;
3. That the court, *or the jury when requested by the patient*, promptly determine the need for hospitalization, and in making such determination have available to it the results of an examination of the patient by one or more psychiatrists;
4. That, in addition, examination by one or more independent psychiatrists other than those appointed by the court be allowed the patient if he requests it;
5. That if, and after, the patient is hospitalized, frequent and periodic reports of his condition, treatment, and progress be made to the committing court or to its agency, to the patient's attorney, and to all of the examining physicians, and, further, that the responsibility for follow-up action on these reports be that of the agency attached to the committing court;
6. That the patient have the right to seek a judicial determination of the need for his continued hospitalization at reasonable intervals of time, and not less than every six months, that in such proceedings the patient be entitled to legal counsel and to examination by one or more independent psychiatrists, and that the burden of proof of the need for continued hospitalization rest with the responsible treatment authority or agency; and
7. That no patient be denied treatment because of administrative, judicial, or institutional delay.

[1] The committee includes Herbert E. Thomas, M.D., chairman, Stanley L. Portnow, M.D., Norman I. Barr, M.D., Herbert A. Raskin, M.D., G.J. Sarwer-Foner, M.D., and Paul R. Miller, M.D.; serving as consultants are Professor Henry H. Foster, Jr., and Ephraim Gomberg.



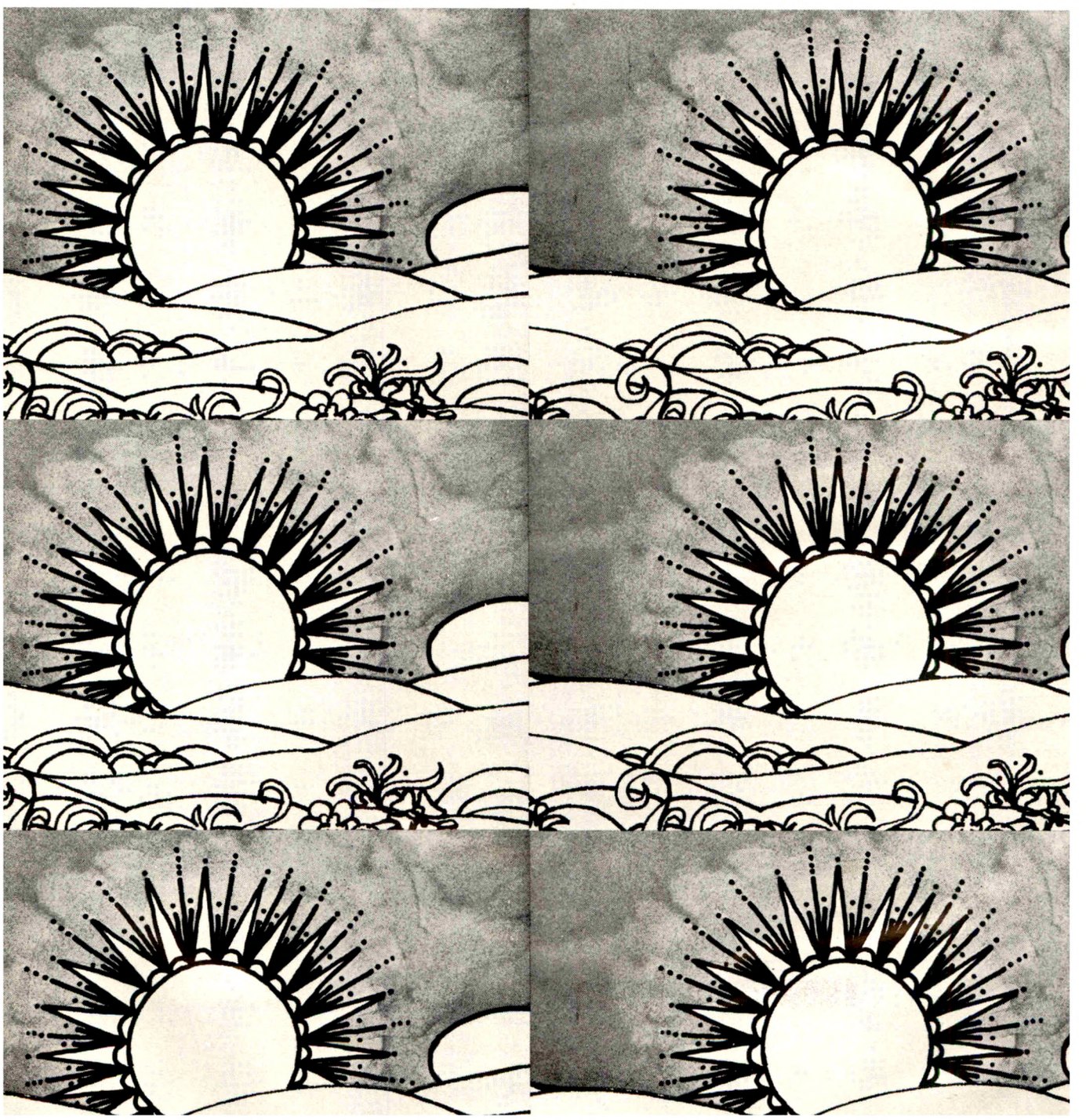
AKINETON®
(biperiden)

- relieves extrapyramidal reactions
- reduces akinesia and rigidity
- combines well with other anti-parkinson agents
- more than ten years of clinical experience

WARNINGS, PRECAUTIONS, ADVERSE REACTIONS: Isolated instances of mental confusion, euphoria, agitation and disturbed behavior have been reported in susceptible patients. Use with caution in manifest glaucoma, prostatism and cardiac arrhythmia. Dry mouth, blurred vision and drowsiness appear infrequently. Some decrease in urinary flow has been noted in a few patients. If gastric irritation occurs, it may be avoided by administering during or after meals. With parenteral administration, mild transient postural hypotension may be evidenced. The only known contraindication is sensitivity to Akineton (biperiden.) DOSAGE: Orally: **Parkinsonism:** 1 tablet, 2 mg., 3 or 4 times daily. **Drug-induced extrapyramidal disorders:** 1 tablet, 2 mg., 1 to 3 times daily. Parenterally: the average adult dose is 2 mg. intramuscularly or intravenously. May be repeated every half-hour until resolution of symptoms is effected, but not more than 4 consecutive doses should be administered in a 24-hour period. SUPPLIED: Tablets—2 mg. (bisected) Akineton HCl. Ampules—1 ml. containing 5 mg. Akineton lactate in an aqueous 1.4% sodium lactate solution.

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The new-day constant for drug-induced parkinsonism:



ARTANE®
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Non-cumulative action makes each day of therapy a new day



That's why ARTANE is ideally suited for the patient on long-term phenothiazine therapy. In economical tablets or SEQUELS Sustained Release Capsules*, it offers you *more* than the rapid reversal of extrapyramidal symptoms.

Usually there is no drug buildup to cause undue toxicity in prolonged therapy. Minimal atropine-like side effects. Accurate dosage titration in adjunctive use. And, to minimize missed doses and anxiety in outpatient therapy— one-dose *all-day* control or prevention with SEQUELS.*

For hospitalized or ambulatory patients, ARTANE has the "constant" they need. Effective *non-cumulative* action.

Tablets—2 mg, 5 mg; Elixir†—2 mg/5 cc or SEQUELS® Sustained Release Capsules—5 mg.

Tablets and Elixir Indications: FDA has evaluated this drug as Effective as an adjunct in the therapy of the indications listed below under SEQUELS.

***INDICATIONS FOR ARTANE SEQUELS:**
Based on a review of this drug in sustained release form by the National Academy of Sciences-National Research Council and/or other information, FDA has classified the indications as follows: Probably effective as an adjunct in the therapy of all forms of parkinsonism (postencephalitic, arteriosclerotic, and idiopathic) and for use in the prevention or control of extrapyramidal disorders due to central nervous system drugs such as reserpine and phenothiazines.

WARNING:
Patients to be treated should have a gonioscope evaluation and close monitoring of intraocular pressures at regular periodic intervals.

Precautions: Patients with cardiac, liver or kidney disorders or with hypertension should be maintained under close observation. In long-term therapy, take care to avoid allergic and other untoward reactions. Use with caution in patients with glaucoma, obstructive disease of the gastrointestinal or genitourinary tracts and in elderly males with possible prostatic hypertrophy. Geriatric patients require strict dosage regulation. Incipient glaucoma may be precipitated.

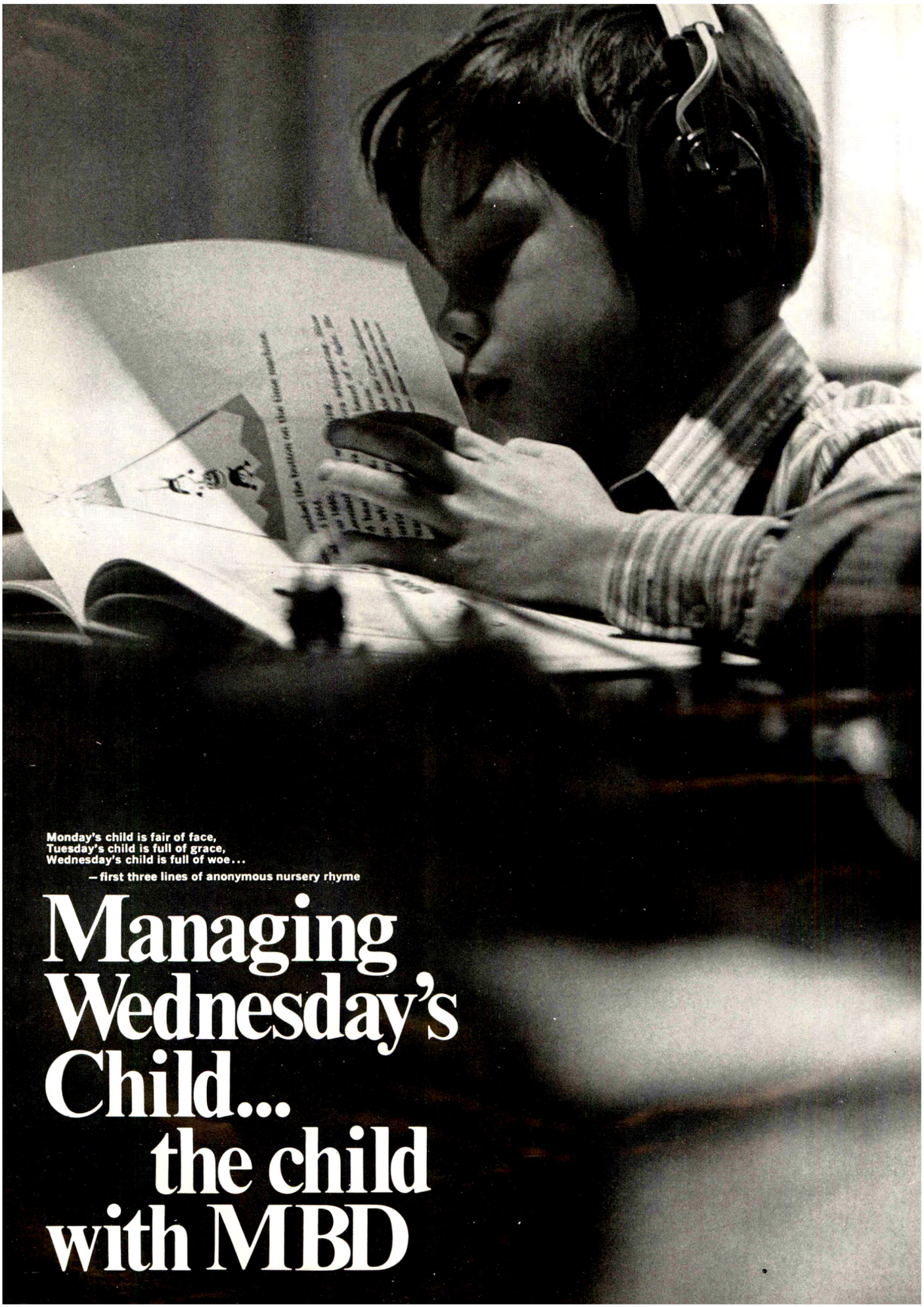
Adverse Reactions: Such effects as dryness of mouth, blurring of vision, dizziness, nausea or nervousness will be experienced by 30 to 50 per cent of patients. (These tend to lessen and can often be controlled by adjusting dosage.) Isolated instances of suppurative parotitis, skin rashes, dilation of the colon, paralytic ileus, delusions, hallucinations and paranoia (1 doubtful case) have been reported. Patients with arteriosclerosis or with a history of idiosyncrasy to drugs may exhibit mental confusion, agitation, disturbed behavior, or nausea and vomiting. If a severe reaction occurs, discontinue drug for a few days, then resume at lower dosage. Psychiatric disturbances can result from overdosage to sustain euphoria. Side effects of any atropine-like drugs include constipation, drowsiness, urinary hesitancy or retention, tachycardia, dilation of the pupil, increased intraocular tension, weakness, vomiting and headache.

†Lime-mint flavored, with 0.08% methylparaben, 0.02% propylparaben, and 5% alcohol as preservatives.

*This drug in sustained release form has been evaluated as probably effective. See Brief Summary.

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716-3
A35



Monday's child is fair of face,
Tuesday's child is full of grace,
Wednesday's child is full of woe...

—first three lines of anonymous nursery rhyme

Managing Wednesday's Child... the child with MBD

Wednesday's child is full of woe"
It need not be this way for the MBD child.
He can learn and adjust if given a helping hand.

Without help, the MBD child may be a slow reader, can find writing difficult, and arithmetic hard to grasp. He may be excitable, and his actions can be disruptive. The result can seriously hamper his educational and social development.

But, properly diagnosed and treated, MBD – Minimal Brain Dysfunction – can be brought under control so that the afflicted child can develop normally.

And Ritalin can play an important part in the total rehabilitation program of the MBD child, which includes remedial measures at home and at school. It's currently the drug of choice in many MBD situations.[1]



Ritalin is well tolerated. It can help control the excessive motor activity of the MBD child and ameliorate behavioral and learning problems.

Of course, Ritalin is not indicated for childhood personality and behavioral disorders not associated with MBD.

Reference

1. Charlton, M. H.: Paper presented at the Annual Convention of the Medical Society of the State of New York, New York, N.Y., Feb. 7, 1971.

Ritalin® hydrochloride ©
(methylphenidate hydrochloride)

TABLETS

INDICATION

Minimal Brain Dysfunction in Children—as adjunctive therapy to other remedial measures (psychological, educational, social)

Special Diagnostic Considerations

Specific etiology of Minimal Brain Dysfunction (MBD) is unknown, and there is no single diagnostic test. Adequate diagnosis requires the use not only of medical but of special psychological, educational, and social resources.

The characteristic signs most often observed are chronic history of short attention span, distractibility, emotional lability, impulsivity, and moderate to severe hyperactivity; specific learning disabilities; perceptual motor impairment; minor neurological signs and abnormal EEG. The diagnosis of MBD must be based upon a complete history and evaluation of the child and not solely on the presence of one or more of these signs.

Drug treatment is not indicated for all children with MBD. Appropriate educational placement is essential and psychological or social intervention may be necessary. When remedial measures alone are insufficient, the decision to prescribe stimulant medication will depend upon the physician's assessment of the chronicity and severity of the child's symptoms.

CONTRAINDICATIONS

Marked anxiety, tension, and agitation, since Ritalin may aggravate these symptoms. Also contraindicated in patients known to be hypersensitive to the drug and in patients with glaucoma.

WARNINGS

Ritalin is not recommended for children under six years, since safety and efficacy in this age group have not been established. Since sufficient data on safety and efficacy of long-term use of Ritalin in children with minimal brain dysfunction are not yet available, those requiring long-term therapy should be carefully monitored. Ritalin should not be used for severe depression of either exogenous or endogenous origin or for the prevention of normal fatigue states. Ritalin may lower the convulsive threshold in patients with or without prior seizures; with or without prior EEG abnormalities, even in absence of seizures. Safe concomitant use of anticonvulsants and Ritalin has not been established. If seizures occur, Ritalin should be discontinued.

Use cautiously in patients with hypertension.

Drug Interactions

Ritalin may decrease the hypotensive effect of guanethidine. Use cautiously with pressor agents and MAO inhibitors. Ritalin may inhibit the metabolism of coumarin anticoagulants, anticonvulsants (phenobarbital, diphenylhydantoin, primidone), phenylbutazone, and tricyclic antidepressants (imipramine, desipramine). Downward dosage adjustments of these drugs may be required when given concomitantly with Ritalin.

Usage in Pregnancy

Adequate animal reproduction studies to establish safe use of Ritalin during pregnancy have not been conducted. Therefore, until more information is available, Ritalin should not be prescribed for women of childbearing age unless, in the opinion of the physician, the potential benefits outweigh the possible risks.

Drug Dependence

Ritalin should be given cautiously to emotionally unstable patients, such as those with a history of drug dependence or alcoholism, because such patients may increase dosage on their own initiative.

Chronically abusive use can lead to marked tolerance and psychic dependence with varying degrees of abnormal behavior. Frank psychotic episodes can occur, especially with parenteral abuse. Careful supervision is required during drug withdrawal, since severe depression as well as the effects of chronic overactivity can be unmasked. Long-term follow-up may be required because of the patient's basic personality disturbances.

PRECAUTIONS

Patients with an element of agitation may react adversely; discontinue therapy if necessary. Periodic CBC and platelet counts are advised during prolonged therapy.

ADVERSE REACTIONS

Nervousness and insomnia are the most common adverse reactions but are usually controlled by reducing dosage and omitting the drug in the afternoon or evening. Other reactions include: hypersensitivity (including skin rash, urticaria, fever, arthralgia, exfoliative dermatitis, and erythema multiforme with histopathological findings of necrotizing vasculitis); anorexia; nausea; dizziness; palpitations; headache; dyskinesia; drowsiness; blood pressure and pulse changes, both up and down; tachycardia; angina; cardiac arrhythmias; abdominal pain; weight loss during prolonged therapy. In children, loss of appetite, abdominal pain, weight loss during prolonged therapy, insomnia, and tachycardia may occur more frequently. Toxic psychosis has been reported.

DOSAGE AND ADMINISTRATION

Children with Minimal Brain Dysfunction (6 years and over)

Start with small doses (eg, 5 mg before breakfast and lunch) with gradual increments of 5 to 10 mg weekly. Daily dosage above 60 mg is not recommended. If improvement is not observed after appropriate dosage adjustment over a one-month period, the drug should be discontinued.

If paradoxical aggravation of symptoms or other adverse effects occur, reduce dosage, or, if necessary, discontinue the drug.

Ritalin should be periodically discontinued to assess the child's condition. Improvement may be sustained when the drug is either temporarily or permanently discontinued.

Drug treatment should not and need not be indefinite and usually may be discontinued after puberty.

HOW SUPPLIED

Tablets, 20 mg (peach, scored); bottles of 100 and 1000.
Tablets, 10 mg (pale green, scored); bottles of 100, 500, 1000 and Strip Dispensers of 100.
Tablets, 5 mg (pale yellow); bottles of 100, 500, and 1000.

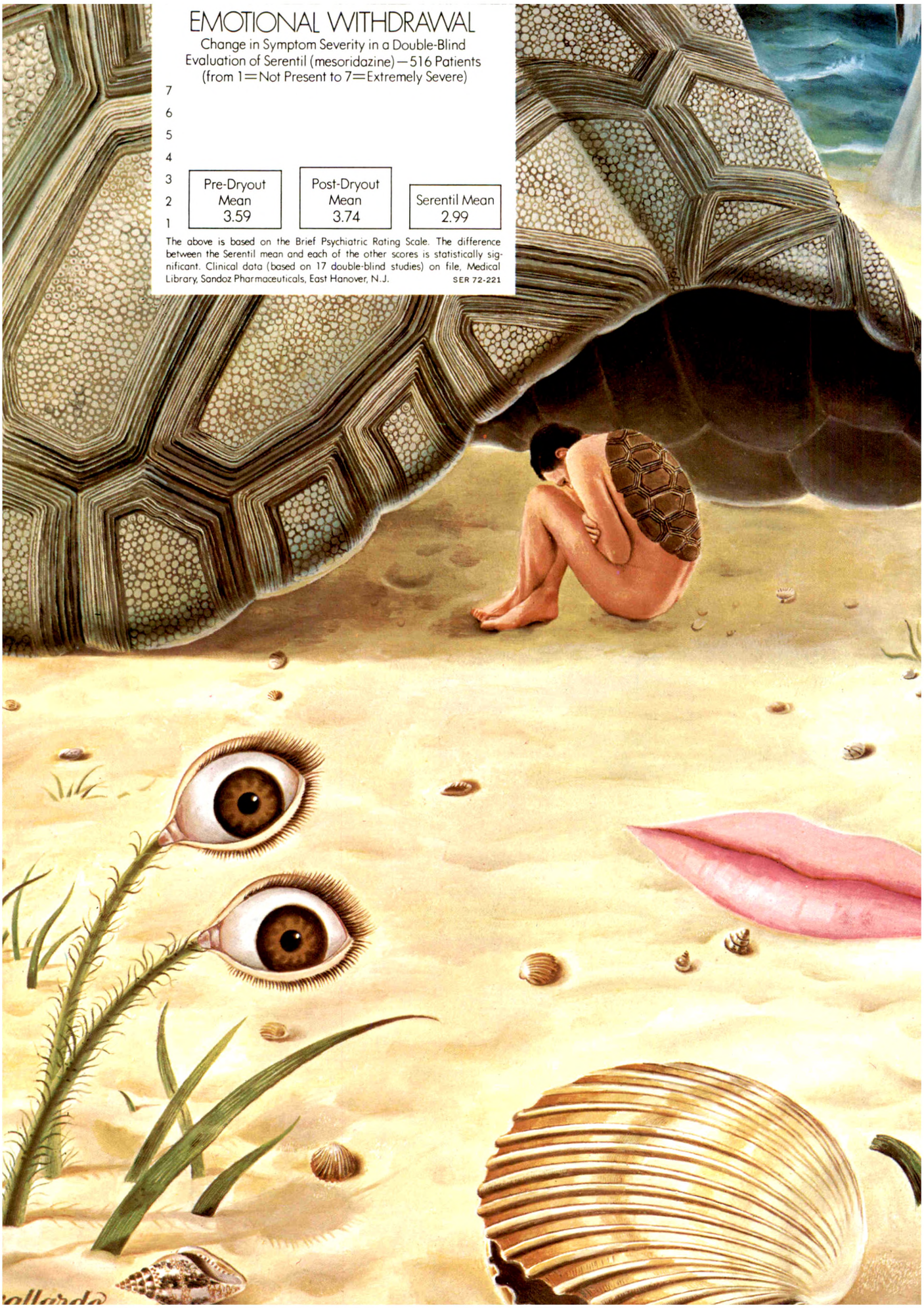
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Ritalin®
(methylphenidate)
only when medication is indicated

CIBA


EMOTIONAL WITHDRAWAL
Change in Symptom Severity in a Double-Blind Evaluation of Serentil (mesoridazine)—516 Patients (from 1=Not Present to 7=Extremely Severe)
7
6
5
4
3
2
1
Pre-Dryout Mean 3.59
Post-Dryout Mean 3.74
Serentil Mean 2.99
The above is based on the Brief Psychiatric Rating Scale. The difference between the Serentil mean and each of the other scores is statistically significant. Clinical data (based on 17 double-blind studies) on file, Medical Library, Sandoz Pharmaceuticals, East Hanover, N.J.
SER 72-221

EMOTIONAL WITHDRAWAL
CONCEPTUAL DISORGANIZATION / ANXIETY
TENSION / HALLUCINATORY BEHAVIOR
SUSPICIOUSNESS / BLUNTED AFFECT

One or more of these symptoms in a schizophrenic is an indication for

Serentil®

(mesoridazine)

Tablets 50 mg. (as the besylate)



Serentil is also available in injectable form

(*Ampuls 1 cc.*: 25 mg. mesoridazine [as the besylate]. Inactive ingredients — disodium edetate, U.S.P., 0.5 mg.; sodium chloride, U.S.P., 7.2 mg.; carbon dioxide gas [bone dry], q.s.; water for injection, U.S.P., q.s. to 1 cc.)

SANDOZ

See next page for brief summary.

EMOTIONAL WITHDRAWAL
CONCEPTUAL DISORGANIZATION / ANXIETY
TENSION / HALLUCINATORY BEHAVIOR
SUSPICIOUSNESS / BLUNTED AFFECT

One or more of these symptoms in a schizophrenic is an indication for



Contraindications: Severe central nervous system depression, comatose states, hypersensitivity.

Warnings: Increase dosage gradually to patients participating in activities requiring complete mental alertness (e.g., driving). The safety of this drug in pregnancy has not been established; hence, it should be given only when the anticipated benefits to be derived from treatment exceed the possible risks to mother and fetus. Use in children under 12 is not recommended. Phenothiazines are capable of potentiating central nervous system depressants as well as atropine and phosphorus insecticides.

Precautions: Ocular changes (seen with other phenothiazines) have not been seen with Serentil (mesoridazine). Because of possible hypotensive reactions, caution in parenteral use is required. Reserve parenteral administration for bedfast patients or for acute ambulatory cases, and keep patient lying down for at least ½ hour after injection. Leukopenia and/or agranulocytosis have been attributed to phenothiazine therapy. Blood dyscrasia (seen with other phenothiazines) has occurred in a single case of transient granulocytopenia.

Adverse Reactions: Serentil (mesoridazine) has demonstrated a remarkably low incidence of adverse reactions when compared with other phenothiazine compounds. *Central Nervous System:* Drowsiness, Parkinson's syndrome, dizziness, weakness, tremor, restlessness, ataxia, dystonia, rigidity, slurring, akathisia, motoric reactions (opisthotonos). *Autonomic Nervous System:* Dry mouth, nausea and vomiting, fainting, stuffy nose, photophobia, constipation and blurred vision. *Endocrine System:* Inhibition of ejaculation and lactation have been noted rarely. *Skin:* Itching, rash, hypertrophic papillae of the tongue and angioneurotic edema. *Cardiovascular System:* Hypotension, tachycardia, EKG changes.

The following reactions have occurred with phenothiazines and should be considered: *Autonomic Reactions*—Miosis, obstipation, anorexia, paralytic ileus. *Cutaneous Reactions*—Erythema, exfoliative dermatitis, contact dermatitis. *Blood Dyscrasias*—Agranulocytosis, leukopenia, eosinophilia, thrombocytopenia, anemia, aplastic anemia, pancytopenia. *Allergic Reactions*—Fever, laryngeal edema, angioneurotic edema, asthma. *Hepatotoxicity*—Jaundice, biliary stasis. *Cardiovascular Effects*—Changes in terminal portion of electrocardiogram, including prolongation of Q-T interval, lowering and inversion of T-wave, and appearance of a wave tentatively identified as a bifid T or a U wave have been observed with phenothiazines, including Serentil (mesoridazine); these appear to be reversible and due to altered repolarization, not myocardial damage. There is no evidence that these changes are precursors of any significant disturbance of cardiac rhythm. Hypotension, rarely resulting in cardiac arrest. *Extrapyramidal Symptoms*—Akathisia, agitation, motor restlessness, dystonic reactions, trismus, torticollis, opisthotonos, oculogyric crises, tremor, muscular rigidity, and akinesia, occasionally persisting for several months or years especially in elderly patients with brain damage. *Endocrine Disturbances*—Menstrual irregularities, altered libido, gynecomastia, weight gain, false positive pregnancy tests. *Urinary Disturbances*—Retention, incontinence. *Others*—Hyperpyrexia, behavioral effects suggestive of a paradoxical reaction, including excitement, bizarre dreams, aggravation of psychoses, and toxic confusional states; following long-term treatment, a peculiar skin-eye syndrome marked by progressive pigmentation of skin or conjunctiva and/or accompanied by discoloration of exposed sclera and cornea; stellate or irregular opacities of anterior lens and cornea.

Dosage and Administration: ORAL: Should be adjusted to needs of the individual. Lowest effective dosage should always be used. When maximum response is achieved, dosage may be reduced gradually to maintenance level. *Schizophrenia:* For most patients, regardless of severity, starting dose of 50 mg. t.i.d. recommended. Usual optimum total daily dose range 100-400 mg. *Behavioral Problems in Mental Deficiency and Chronic Brain Syndrome:* For most patients starting dose of 25 mg. t.i.d. recommended. Usual optimum total daily dose range 75-300 mg. *Alcoholism:* For most patients usual starting dose is 25 mg. b.i.d. Usual optimum total daily dose range 50-200 mg. *Psychoneurotic Manifestations:* For most patients usual starting dose is 10 mg. t.i.d. Usual optimum total daily dose range 30-150 mg. INJECTABLE FORM: For situations in which an intramuscular form of medication is indicated. For most patients a starting dose of 25 mg. is recommended, to be repeated in 30-60 minutes if necessary. Usual optimum total daily dose range 25-200 mg.

Before prescribing, consult package circular.

Sandoz Pharmaceuticals/East Hanover, N.J. 07936

SANDOZ

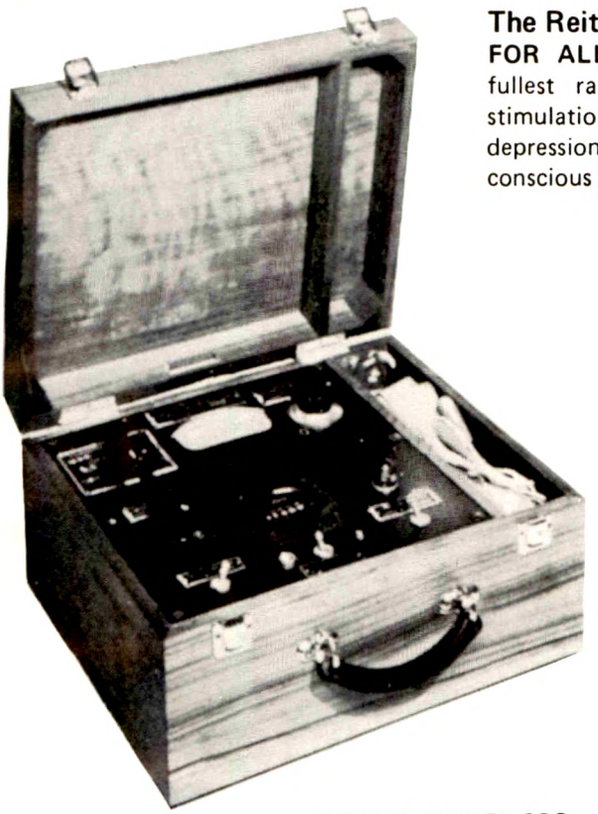
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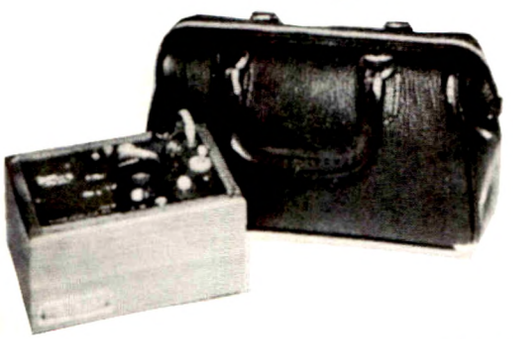
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The SOS has also been used universally for Convulsive Therapy, Non-Convulsive Therapies, Electro-Sleep Therapy, Focal Treatment, Mono-Polar Treatment, Barbiturate Coma (and other respiratory problems), Mild Sedac, Deep Sedac Therapy, Pre-Convulsive Sedac, Post-Convulsive Sedac, Neurological Conditions, and Measurement Procedures.

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Other Models Still Available: The CW47, original therapeutic cerebral stimulator with only 3 of the 9 treatment current selections available on Model SOS.

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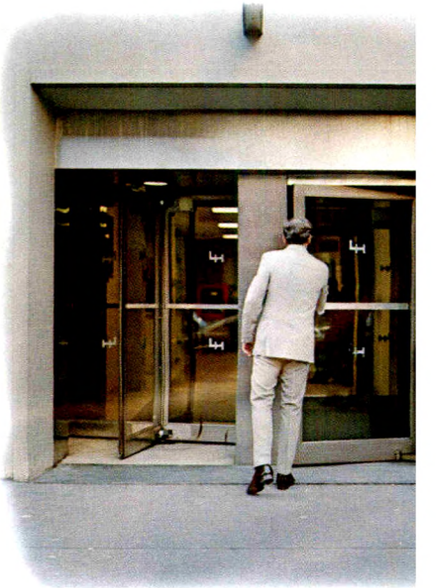
The challenge: versatility

The stereotype image of "psychiatrist and couch" is an anachronism because today's psychiatrist is called on to diagnose and treat depression in a variety of clinical settings. And when an antidepressant medication is chosen, it must be as flexible and as adaptable as the physician prescribing it.



The psychiatrist's office still represents the setting in which the psychoanalytic process recognizes its fullest potential. Frequently, however, an antidepressant must be employed to foster a working therapeutic relationship. With effective symptomatic relief often provided by ELAVIL® (Amitriptyline HCl, MSD), depressed patients may be able to concentrate on underlying factors instead of somatic manifestations.

The general hospital today usually provides a psychiatric unit where depressed patients are treated. Here, too, the symptomatic relief ELAVIL often provides can be a valuable part of total treatment. As depressive symptoms are relieved, for example, patients may take advantage of the therapeutic activities offered and, even more important, may be discharged sooner and treated on an outpatient basis.



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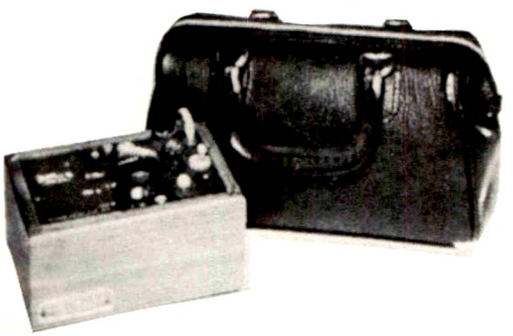
The Reiter MODEL SOS–THE ONE INSTRUMENT FOR ALL ESTABLISHED TECHNIQUES, provides the fullest range of safest therapies. For painless, gentle stimulation of the conscious patient to relieve anxiety, depression, etc. Maximum safety, no additives–patient conscious and cooperating with therapy.

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The general hospital today usually provides a psychiatric unit where depressed patients are treated. Here, too, the symptomatic relief ELAVIL often provides can be a valuable part of total treatment. As depressive symptoms are relieved, for example, patients may take advantage of the therapeutic activities offered and, even more important, may be discharged sooner and treated on an outpatient basis.



In the outpatient clinic, where follow-up treatment may be necessary for three months or longer, ELAVIL is highly effective in maintaining relief, especially in patients who responded well to higher doses while hospitalized. As a result, these patients may continue to function in their daily activities.



In the mental hospital, severely depressed patients present challenges for psychiatrist and staff alike. Here, the usefulness of ELAVIL is increased by the 50-mg tablet that provides the higher doses often required and by the injectable form for more rapid effect.



The community mental health center, a remarkable innovation in the field of modern psychiatry, offers a unique setting for treating patients with clinically significant depression. Here, too, ELAVIL often proves to be a true asset to the psychiatrist by providing highly effective symptomatic relief that can encourage communication, support the psychotherapeutic relationship, and accelerate the achievement of desired therapeutic goals.

in the treatment of depression

TABLETS: 10 mg, 25 mg, and 50 mg INJECTION: 10 mg per ml

ELAVIL®

(AMITRIPTYLINE HCl | MSD)

helps open many doors

For a brief summary of prescribing information, please see following page.

MSD
MERCK
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DOHME

addendum

ELAVIL®
(AMITRIPTYLINE HCl | MSD)
dosage forms for differing patient needs

25 mg (yellow)



This tablet may prove useful for most outpatients, who generally do well on 25 mg three times a day. This dosage may be increased to a total of 150 mg a day. Dosage increases are made preferably in the late afternoon or at bedtime. The sedative effect may be apparent before the antidepressant effect is noted. An adequate therapeutic effect may take as long as 30 days to develop.

50 mg (beige)



The 50-mg tablet may be indicated whenever higher dosages are required, as for example when increases are necessary in the late afternoon or bedtime doses. It may also be convenient for many hospitalized patients who may need 100 mg a day initially. In these patients, dosage may be increased gradually to 200 mg a day if necessary. A small number of hospitalized patients may need as much as 300 mg a day.

10 mg (blue)



Because lower doses are generally recommended for adolescents and elderly patients, the 10-mg tablets may be most serviceable. Ten mg three times a day with 20 mg at bedtime may be satisfactory in adolescent and elderly patients who do not tolerate higher dosages.

INJECTION
10 mg per ml



For patients unable or unwilling to take tablets, the injectable form may be suitable initially. The tablets should replace the injection as soon as possible. Initial intramuscular dosage is 20 to 30 mg (2 to 3 ml) four times a day. When Injection ELAVIL is administered intramuscularly, the effects may appear more rapidly than with oral administration.

Usage in Children: In view of the lack of experience in children, this drug is not recommended at the present time for patients under 12 years of age.

Contraindications: Known hypersensitivity. Should not be given concomitantly with a monoamine oxidase inhibitor or within at least 14 days following the discontinuance of a monoamine oxidase inhibitor since hyperpyretic crises, severe convulsions, and deaths have occurred. When used to replace a monoamine oxidase inhibitor, initiate dosage of amitriptyline HCl cautiously with gradual increase in dosage until optimum response is achieved. Not recommended during the acute recovery phase following myocardial infarction or for patients under 12 years of age.

Warnings: May block the antihypertensive action of guanethidine or similarly acting compounds. Should be used with caution in patients with a history of seizures or urinary retention, or with angle-closure glaucoma or increased intraocular pressure. Patients with cardiovascular disorders should be watched closely; arrhythmias, sinus tachycardia, and prolongation of the conduction time have been reported, particularly with high doses; myocardial infarction and stroke have been reported with drugs of this class. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. May impair mental and/or physical abilities required for performance of hazardous tasks, such as operating machinery or driving a motor vehicle. Safe use during pregnancy and lactation has not been established; in pregnant patients, nursing mothers, or women who may become pregnant, weigh possible benefits against possible hazards to mother and child.

Precautions: Schizophrenic patients may develop increased symptoms of psychosis; patients with paranoid symptomatology may have an exaggeration of such symptoms; manic depressive patients may experience a shift to the manic phase. In these circumstances, the dose of amitriptyline HCl may be reduced or a major tranquilizer, such as perphenazine, may be administered concurrently.

When given with anticholinergic agents or sympathomimetic drugs, close supervision and careful adjustment of dosages are required. Use cautiously in patients receiving large doses of ethchlorvynol, since transient delirium has been reported on concurrent administration. May enhance the response to alcohol and the effects of barbiturates and other CNS depressants. The possibility of suicide in depressed patients remains during treatment and until significant remission occurs; this type of patient should not have easy access to large quantities of the drug. Concurrent electroshock therapy may increase the hazards associated with such therapy; such treatment should be limited to patients for whom it is essential. When possible, discontinue the drug several days before elective surgery. Both elevation and lowering of blood sugar levels have been reported.

Adverse Reactions: *Note:* Included in this listing are a few adverse reactions not reported with this specific drug. However, pharmacological similarities among the tricyclic antidepressant drugs require that each reaction be considered when amitriptyline is administered. *Cardiovascular:* Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus. *Anticholinergic:* Dry mouth, blurred vision, disturbance of accommodation, constipation, paralytic ileus, urinary retention, dilatation of urinary tract. *Allergic:* Skin rash, urticaria, photosensitization, edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis, leukopenia, eosinophilia, purpura, thrombocytopenia. *Gastrointestinal:* Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, parotid swelling, black tongue. *Endocrine:* Testicular swelling and gynecomastia in the male, breast enlargement and galactorrhea in the female, increased or decreased libido, elevation and lowering of blood sugar levels. *Other:* Dizziness, weakness, fatigue, headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, drowsiness, jaundice, alopecia. *Withdrawal Symptoms:* Abrupt cessation of treatment after prolonged administration may produce nausea, headache, and malaise; these are not indicative of addiction.

Overdosage: The intravenous administration of 1–3 mg of physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning.

How Supplied: Tablets containing 10 mg and 25 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100, 1000, and 5000; tablets containing 50 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100 and 1000; for intramuscular use, in 10-ml vials containing per ml: 10 mg amitriptyline HCl, 44 mg dextrose, 1.5 mg methylparaben and 0.2 mg propylparaben as preservatives, and water for injection q.s. 1 ml.

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., INC., West Point, Pa. 19486

in the treatment of depression

ELAVIL®
(AMITRIPTYLINE HCl | MSD)
helps open many doors

New APA publications—

HEALTH INSURANCE AND PSYCHIATRIC CARE: UTILIZATION AND COST

AUTHORS: Louis S. Reed, Ph.D., Evelyn S. Myers, Patricia L. Scheidemandel

Those who hedge on granting the mentally ill adequate and equitable coverage under any national health insurance system have done so mainly on the ground that it would bankrupt the system. This book shows that this is not so. The most comprehensive study of the utilization and cost of care for mental disorders under health insurance ever undertaken, it gives facts and figures on more than 40 private health insurance plans or organizations, Medicare, other public programs in this country, and Canadian programs of hospital and medical service insurance. A wealth of data on inpatient care, in-hospital physicians' services, and ambulatory care is provided.

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You've talked...
you've listened...
but here she is again.

Looks like chronic anxiety.* Looks like a case for

Stelazine®

brand of **trifluoperazine HCl 2 mg. tablets**

For mildly anxious patients, your reassurance and some friendly advice will often carry the patient through the anxious episode.

But for chronic neurotic anxiety—the patient for whom anxiety is a constant part of life—medication may be required.

'Stelazine' can provide incisive control of anxiety, let the patient function more normally, and make her more receptive to your counsel.

* 'Stelazine' has been evaluated as possibly effective for this indication. See Brief Summary.

Before prescribing, see complete prescribing information, including dosage and symptoms and treatment of overdosage, in SK&F literature or *PDR*.

* **Indications**

Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: For the management of the manifestations of psychotic disorders.

Possibly effective: To control excessive anxiety, tension and agitation as seen in neuroses or associated with somatic conditions.

Final classification of the less-than-effective indications requires further investigation.

Contraindications: Comatose or greatly depressed states due to C.N.S. depressants; blood dyscrasias; bone marrow depression; liver damage.

Warnings: Caution patients about activities requiring alertness (e.g., operating vehicles or machinery), especially during the first few days' therapy.

Use in pregnancy only when necessary for patient's welfare.

Precautions: Use cautiously in angina. Avoid high doses and parenteral administration when cardiovascular system is impaired. Antiemetic effect may mask signs of toxic drug overdosage or physical disorders. Additive effect is possible with other C.N.S. depressants. Prolonged administration of high doses may result in cumulative effects with severe C.N.S. or vasomotor symptoms. If retinal changes occur, discontinue drug. Agranulocytosis, thrombocytopenia, pancytopenia, anemia, cholestatic jaundice, liver damage have been reported.

Adverse Reactions: Drowsiness, dizziness, skin reactions, rash, dry mouth, insomnia, amenorrhea, fatigue, muscular weakness, anorexia, lactation, blurred vision. Neuromuscular (extrapyramidal) reactions: motor restlessness, dystonias, pseudo-parkinsonism, persistent tardive dyskinesia.

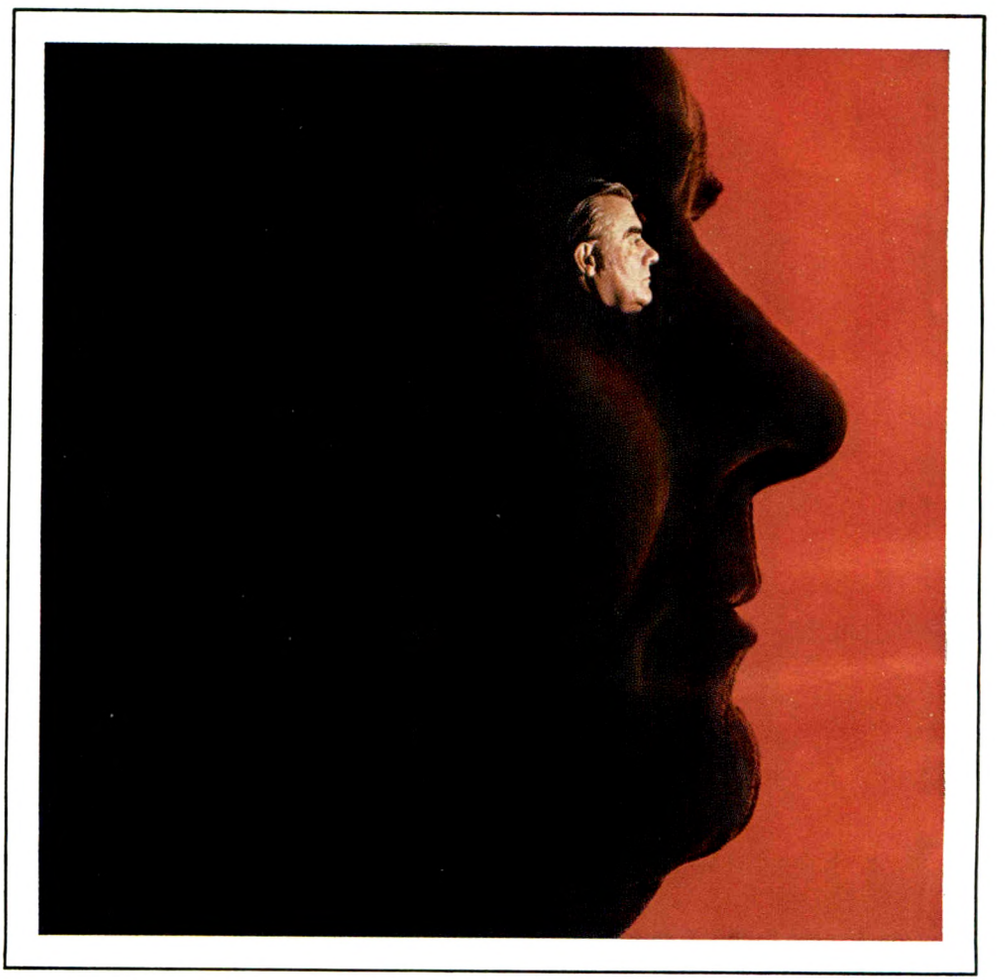
Other adverse reactions reported with Stelazine (trifluoperazine HCl, SK&F) or other phenothiazines: Some adverse effects are more frequent or intense in specific disorders (e.g., mitral insufficiency or pheochromocytoma).

Grand mal convulsions; altered cerebrospinal fluid proteins; cerebral edema; prolongation and intensification of the action of C.N.S. depressants, atropine, heat, and organophosphorus insecticides; nasal congestion, headache, nausea, constipation, obstipation, adynamic ileus, inhibition of ejaculation; reactivation of psychotic processes, catatonic-like states; hypotension (sometimes fatal); cardiac arrest; leukopenia, eosinophilia, pancytopenia, agranulocytosis, thrombocytopenic purpura; jaundice, biliary stasis; menstrual irregularities, galactorrhea, gynecomastia, false positive pregnancy tests; photosensitivity, itching, erythema, urticaria, eczema up to exfoliative dermatitis; asthma, laryngeal edema, angioneurotic edema, anaphylactoid reactions; peripheral edema; reversed epinephrine effect; hyperpyrexia; a systemic lupus erythematosus-like syndrome; pigmentary retinopathy; with prolonged administration of substantial doses, skin pigmentation, epithelial keratopathy, and lenticular and corneal deposits. EKG changes have been reported, but relationship to myocardial damage is not confirmed. Discontinue long-term, high-dose therapy gradually. NOTE: Sudden death in patients taking phenothiazines (apparently due to cardiac arrest or asphyxia due to failure of cough reflex) has been reported, but no causal relationship has been established.

Supplied: Tablets, 1 mg., 2 mg., 5 mg. and 10 mg., in bottles of 100; Injection, 2 mg./ml.; and Concentrate, 10 mg./ml.

Manufactured and distributed by SK&F Co., Carolina, P.R. 00630, under Stelazine® trademark license from Smith Kline & French Laboratories, Philadelphia, Pa.

BASIC ANXIETIES OF TODAY'S NEUROTIC PATIENT



The Inadequate Self

Low Self-Esteem... High Levels of Anxiety

When the neurotic patient thinks of himself—and he tends to be excessively introspective—his thoughts often represent an extreme self-judgment, a condemning of himself. Characteristically, the neurotic is controlled by self-defining patterns of thoughts inadequately (or pathologically) developed in childhood. (In many cases, his negative self-evaluation stems from the internalization of early parental contempt.) Now, as an adult, he still sees himself as puny, weak, ineffectual, even worthless. Moreover, he lives in a constantly changing, extraordinarily complex and dehumanizing society which, unlike the societies of more stable eras, tends to *deepen* the individual's feelings of inadequacy and helplessness—his inability to cope with stress and to make decisions.

Because the neurotic patient's self-image may be poor, he takes great pains to conceal his presumed inadequacies from others, and their evaluations of his behavior can assume enormous importance. Furthermore, any real, or imagined, disapproval from others tends to induce disproportionately high levels of immobilizing anxiety.

In such cases, the neurotic patient may find himself in a peculiar kind of trap: severe anxiety—with its handicapping effect on both performance and concentration—may reinforce his sense of inadequacy and thus help perpetuate his already ingrained, habitual low self-esteem.

Librium (chlordiazepoxide HCl) In Today's Psychiatric Practice

In many such cases—when the patient's anxiety is, in the therapist's opinion, severely distressing and disabling—Librium (chlordiazepoxide HCl) often becomes a highly useful adjunct to psychotherapy. A dependable, effective antianxiety agent, Librium generally helps keep the neurotic patient's anxiety at tolerable levels, until such medication is no longer required. In addition, the calming influence of Librium may help the patient remain significantly less tense and apprehensive *between* counseling sessions—and may thus help to restore effective performance. In general use, the most common side effects reported have been drowsiness, ataxia and confusion, particularly in the elderly and debilitated. (See summary of prescribing information.)

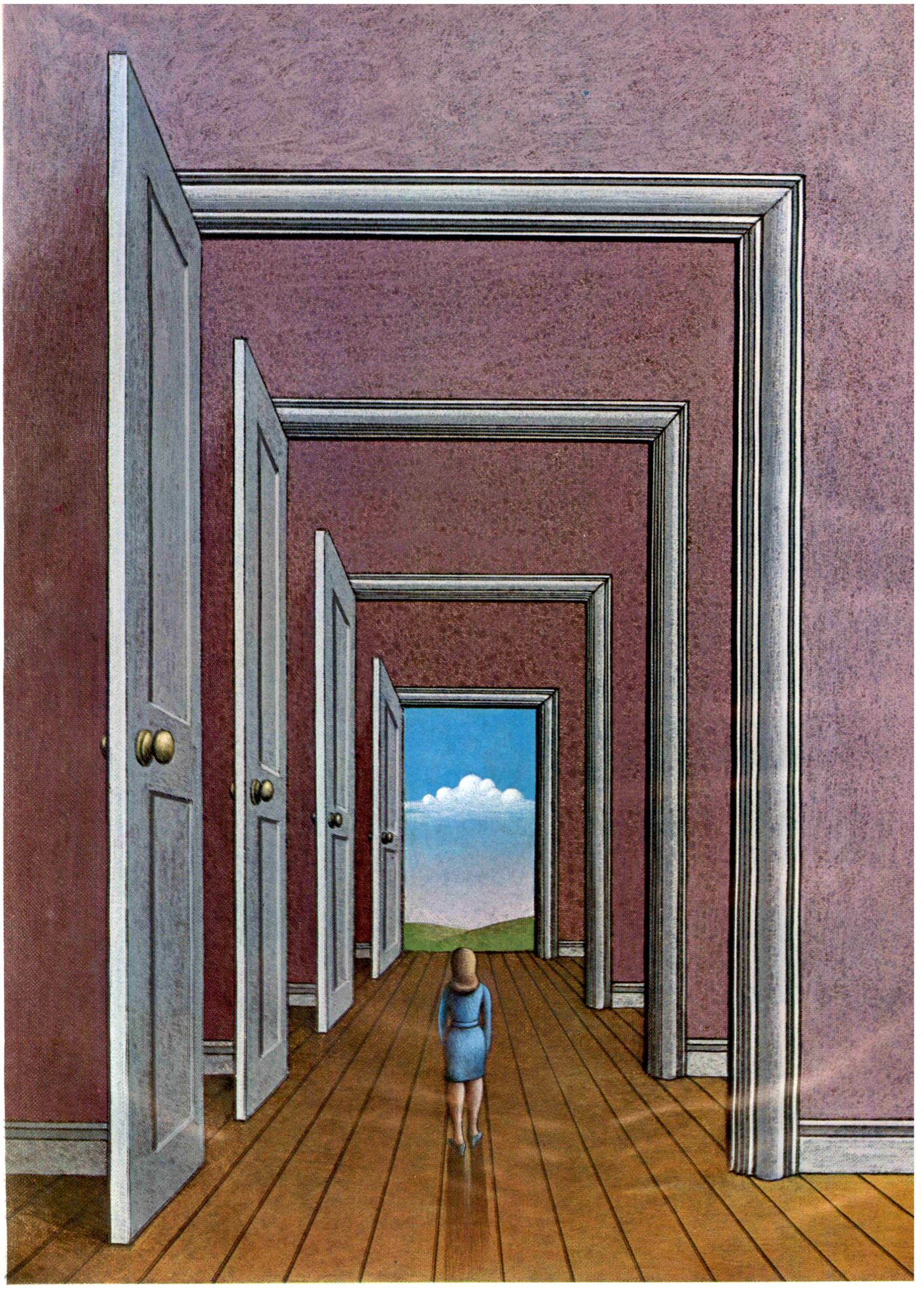
Librium®
(chlordiazepoxide HCl) 10-mg, 25-mg capsules up to 100 mg daily in severe anxiety

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.
Contraindications: Patients with known hypersensitivity to the drug.
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.
Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.
Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.
Supplied: Librium Capsules containing 5 mg, 10 mg or 25 mg chlordiazepoxide HCl. Libritabs® Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110



A HEAD START FOR THE CLINICALLY DEPRESSED PATIENT.

All tricyclic antidepressants take from one to four weeks before optimal antidepressant effect is seen.

Sinequan (doxepin HCl)—the newest tricyclic antidepressant—is no exception.

But, in that waiting period, Sinequan offers the clinically depressed patient both:

prompt sedative activity to begin relieving the sleep disturbances often characteristic of depression, and

marked antianxiety activity to help relieve the apprehension, tension, worry and fear that usually accompany depression.

Further, the incidence of cardiovascular side effects with Sinequan is relatively low. Tachycardia and hypotension are infrequent. (Drowsiness is the most common side effect.) And Sinequan, unlike other tricyclic antidepressants, does not generally affect the activity of guanethidine and similarly acting compounds at usual clinical doses.

Prompt sedative activity. Marked antianxiety activity. Low incidence of cardiovascular side effects.

It's a head start for the clinically depressed patient.

THE NEWEST TRICYCLIC ANTIDEPRESSANT— WITH DIFFERENCES YOU CAN SEE.

Sinequan®
DOXEPIN HCl
25-mg. and 50-mg. capsules

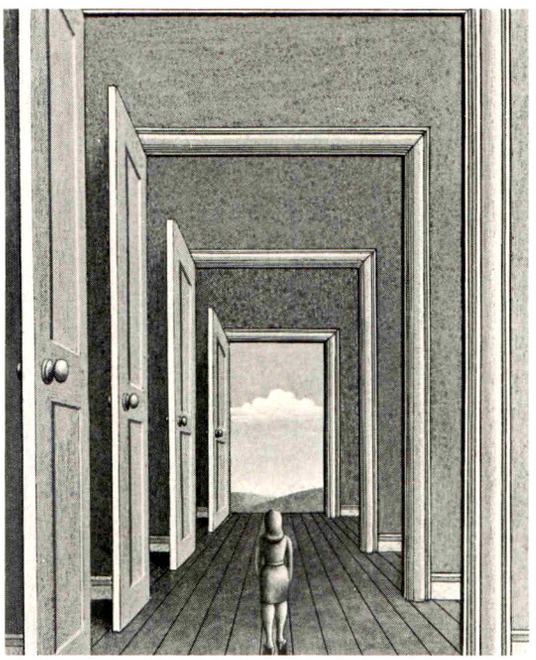
Pfizer LABORATORIES DIVISION
PFIZER INC.

©1973, PFIZER INC.

(See Brief Summary on following page for information on adverse reactions, contraindications, warnings and precautions.)

Sinequan®
DOXEPIN HCl
25-mg. and 50-mg. capsules

THE NEWEST TRICYCLIC ANTIDEPRESSANT—WITH DIFFERENCES YOU CAN SEE.



BRIEF SUMMARY
Sinequan® (doxepin HCl) **Capsules**

Contraindications. Sinequan (doxepin HCl) is contraindicated in individuals who have shown hypersensitivity to the drug.

Sinequan (doxepin HCl) is contraindicated in patients with glaucoma or a tendency to urinary retention.

Warnings. *Usage in Pregnancy:* Sinequan (doxepin HCl) has not been studied in the pregnant patient. It should not be used in pregnant women unless, in the judgment of the physician, it is essential for the welfare of the patient, although animal reproductive studies have not resulted in any teratogenic effects.

Usage in Children: The use of Sinequan (doxepin HCl) in children under 12 years of age is not recommended, because safe conditions for its use have not been established.

MAO Inhibitors: Serious side effects and even death have been reported following the concomitant use of certain drugs with MAO inhibitors. Therefore, MAO inhibitors should be discontinued at least two weeks prior to the cautious initiation of therapy with Sinequan (doxepin HCl). The exact length of time may vary and is dependent upon the particular MAO inhibitor being used, the length of time it has been administered, and the dosage involved.

Precautions. Since drowsiness may occur with the use of this drug, patients should be warned of that possibility and cautioned against driving a car or operating dangerous machinery while taking this drug.

Patients should also be cautioned that their response to alcohol may be potentiated.

Since suicide is an inherent risk in any depressed patient and may remain so until significant improvement has occurred, patients should be closely supervised during the early course of therapy.

Although Sinequan (doxepin HCl) has significant tranquilizing activity, the possibility of activation of psychotic symptoms should be kept in mind.

Other structurally related psychotherapeutic agents (e.g., iminodibenzyls and dibenzocycloheptenes) are capable of blocking the effects of guanethidine and similarly acting compounds in both the animal and man. Sinequan (doxepin HCl), however, does not show this effect in animals. At the usual clinical dosage, 75 to 150 mg. per day, Sinequan (doxepin HCl) can be given concomitantly with guanethidine and related compounds without blocking the antihypertensive effect. At doses of 300 mg. per day or above, Sinequan (doxepin HCl) does exert a significant blocking effect. In addition, Sinequan (doxepin HCl) was similar to the other structurally related psychotherapeutic agents as regards its ability to potentiate norepinephrine response in the animal. However, in the human this effect was not seen. This is in agreement with the low incidence of the side effect of tachycardia seen clinically.

Adverse Reactions. *Anticholinergic Effects:* Dry mouth, blurred vision, and constipation have been reported. They are usually mild, and often subside with continued therapy or reduction of dose.

Central Nervous System Effects: Drowsiness has been observed. This usually occurs early in the course of treatment, and tends to disappear as therapy is continued.

Cardiovascular Effects: Tachycardia and hypotension have been reported infrequently.

Other infrequently reported side effects include extrapyramidal symptoms, gastrointestinal reactions, secretory effects such as increased sweating, weakness, dizziness, fatigue, weight gain, edema, paresthesias, flushing, chills, tinnitus, photophobia, decreased libido, rash, and pruritus.

Dosage. For most patients with illness of mild to moderate severity, a starting dose of 25 mg. t.i.d. is recommended. Dosage may subsequently be increased or decreased at appropriate intervals and according to individual response. The usual optimum dose range is 75 mg./day to 150 mg./day.

In more severely ill patients an initial dose of 50 mg. t.i.d. may be required with subsequent gradual increase to 300 mg./day if necessary. Additional therapeutic effect is rarely to be obtained by exceeding a dose of 300 mg./day.

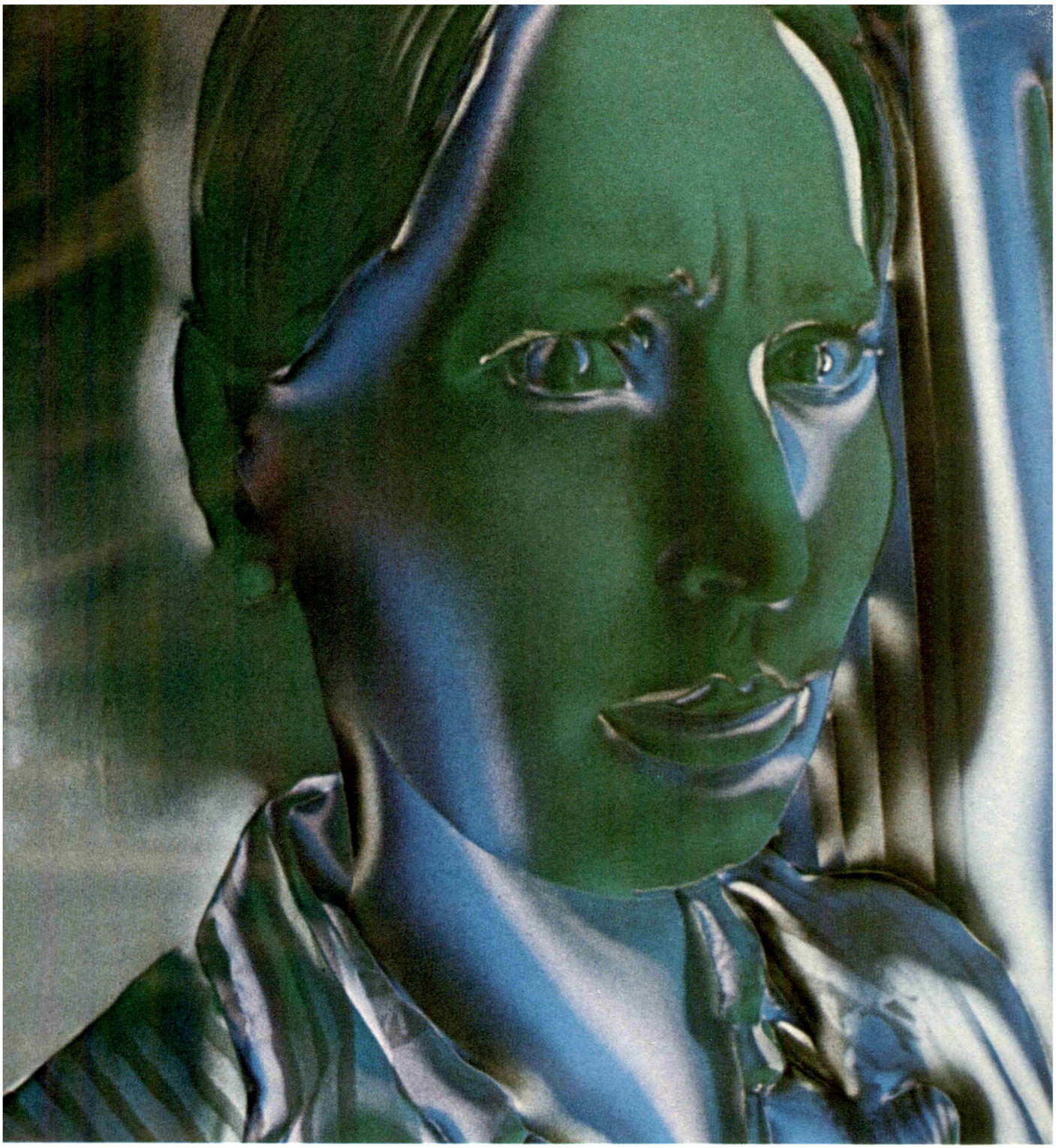
In patients with very mild symptomatology or emotional symptoms accompanying organic disease, lower doses may suffice. Some of these patients have been controlled on doses as low as 25-50 mg./day.

Although optimal antidepressant response may not be evident for two to three weeks, antianxiety activity is rapidly apparent.

Supply. Sinequan (doxepin HCl) is available as capsules containing doxepin HCl equivalent to 10 mg., 25 mg., and 50 mg. of doxepin in bottles of 100 and 1000.

More detailed professional information available on request.

Pfizer **LABORATORIES DIVISION**
PFIZER INC.



Suspicious and hostile?...Or accessible?

While psychotic symptoms remain acute, the barrier between you and the overly suspicious, hostile patient may be insurmountable. Prompt intervention with HALDOL (haloperidol) often makes it possible for you to reach... relate...rehabilitate.

And rapport with such patients is further enhanced because HALDOL usually leaves patients alert and relatively non-sedated.

accessibility often begins with

HALDOL® (haloperidol)

For information relating to Indications, Contraindications, Warnings, Precautions and Adverse Reactions, please turn page.

Haldol®
(HALOPERIDOL)

a first choice for prompt rapport

A Dosage Form for Every Need:

4 tablet strengths for convenience in individualizing dosage: ½ mg., 1 mg., 2 mg. and 5 mg.

An undetectable, tasteless Liquid Concentrate for the patient unable or unwilling to swallow tablets: 2 mg. per cc.

A rapid-acting Injection for psychiatric emergencies: 5 mg. per cc., with 0.5 mg. methylparaben and 0.05 mg. propylparaben per cc., and lactic acid for pH adjustment to 3.4±0.2.

Summary of Directions for Use

Indications: For the treatment of such symptoms as moderate to severe agitation, anxiety and tension, assaultiveness, delusions, hallucinations, hostility, and hyperactivity when they are manifestations of psychosis including schizophrenia, the manic type of manic depressive illness, or psychotic reactions associated with organic brain syndromes or mental retardation. For the control of tics and vocal utterances of Gilles de la Tourette's Syndrome.

Contraindications: HALDOL (haloperidol) is contraindicated in patients who are severely depressed, comatose, have CNS depression due to alcohol or other centrally-acting depressants, have Parkinson's disease or are hypersensitive to this drug.

Warnings: ***Usage in Pregnancy***—Safe use of HALDOL (haloperidol) in pregnancy and lactation has not been established; therefore, its use in pregnancy, in nursing mothers, or in women of childbearing potential requires that the possible benefits of the drug be weighed against the potential hazards. A case of phocomelia in an infant whose mother received haloperidol along with a number of other medications during the first trimester of pregnancy has been reported (a causal relationship was not established in this case). Animals receiving 2 to 20 times the maximum human dose of HALDOL orally and/or parenterally showed increased incidence of resorption, reduced fertility, delayed delivery, dose-related pup mortality (presumably due to lack of maternal care reflecting CNS depression).

Usage in Children—Safety and effectiveness in children have not been established; therefore, this drug is not recommended for use in the pediatric age group.

General—Cases of bronchopneumonia, some fatal, have followed the use of major tranquilizers, including haloperidol. It has been postulated that lethargy and decreased sensation of thirst may lead to dehydration, hemoconcentration and reduced pulmonary ventilation. If these signs and symptoms appear, especially in the elderly, the physician should institute remedial therapy promptly. Although not reported with HALDOL (haloperidol), decreased serum cholesterol and/or cutaneous and ocular changes have been reported in patients receiving chemically-related drugs. HALDOL may impair the mental and/or physical abilities required for the performance of hazardous tasks such as operating machinery or driving a motor vehicle. The ambulatory patient should be warned accordingly. The use of alcohol should be avoided due to possible additive effects and hypotension.

Precautions: HALDOL (haloperidol) should be administered cautiously to patients: (1)—with severe cardiovascular disorders, because of the possibility of transient hypotension and/or precipitation of anginal pain. Should hypotension occur and a vasopressor be required, *epinephrine should not be used* since HALDOL may block its vasopressor activity and paradoxical further lowering of blood pressure may occur. (2)—receiving anticonvulsant medication, because HALDOL may lower the convulsive threshold, although it will *not* increase the effects of anticonvulsant medication. Adequate anticonvulsant therapy should be maintained concomitantly. (3)—with known allergies, or with a history of allergic reactions to drugs. (4)—receiving anticoagulants, since an isolated instance of interference occurred with the effects of one anticoagulant (phenindione).

If concomitant anti-Parkinson medication is required, it may have to be continued after haloperidol is discontinued because of the difference in excretion rates. If both are discontinued simultaneously, extrapyramidal symptoms may occur. Intraocular pressure may increase when anticholinergic drugs, including anti-Parkinson agents, are administered concomitantly with HALDOL. When HALDOL is used to control mania in cyclic disorders there may be a rapid mood swing to depression.

Adverse Reactions: ***CNS Effects:*** *Extrapyramidal Reactions*—Neuromuscular (extrapyramidal) reactions have been reported frequently, often during the first few days of treatment. Generally they involved Parkinson-like symptoms which usually were mild to moderately severe and reversible. Other types of neuromuscular reactions (motor restlessness, dystonia, akathisia, hyperreflexia, opisthotonos, oculogyric crises) have been reported far less frequently, but were often more severe. Severe extrapyramidal reactions have been reported at relatively low doses. Generally extrapyramidal symptoms are dose related since they occur at relatively high doses and disappear or become less severe when the dose is reduced. Administration of anti-Parkinson drugs may be required for control of such reactions. Persistent extrapyramidal reactions have been reported and the drug may have to be discontinued in such cases. *Other CNS Effects*—Insomnia, restlessness, anxiety, euphoria, agitation, drowsiness, depression, lethargy, headache, confusion, vertigo, grand mal seizures, and exacerbation of psychotic symptoms including hallucinations. ***Cardiovascular Effects:*** Tachycardia and hypotension. ***Hematologic Effects:*** Reports have appeared of mild and usually transient leukopenia and leukocytosis, minimal decreases in red blood cell counts, anemia, or a tendency toward lymphomonocytosis. Agranulocytosis has rarely been reported and then only in association with other medication. ***Liver Effects:*** Impaired liver function and/or jaundice have been reported, although a causal relationship has not been established. ***Dermatologic Reactions:*** Maculopapular and acneiform skin reactions and isolated cases of photosensitivity and loss of hair. ***Endocrine Disorders:*** Lactation, breast engorgement, mastalgia, menstrual irregularities, gynecomastia, impotence, increased libido, hyperglycemia and hypoglycemia. ***Gastrointestinal Effects:*** Anorexia, constipation, diarrhea, hypersalivation, dyspepsia, nausea and vomiting. ***Autonomic Reactions:*** Dry mouth, blurred vision, urinary retention and diaphoresis. ***Respiratory Effects:*** Laryngospasm, bronchospasm and increased depth of respiration.

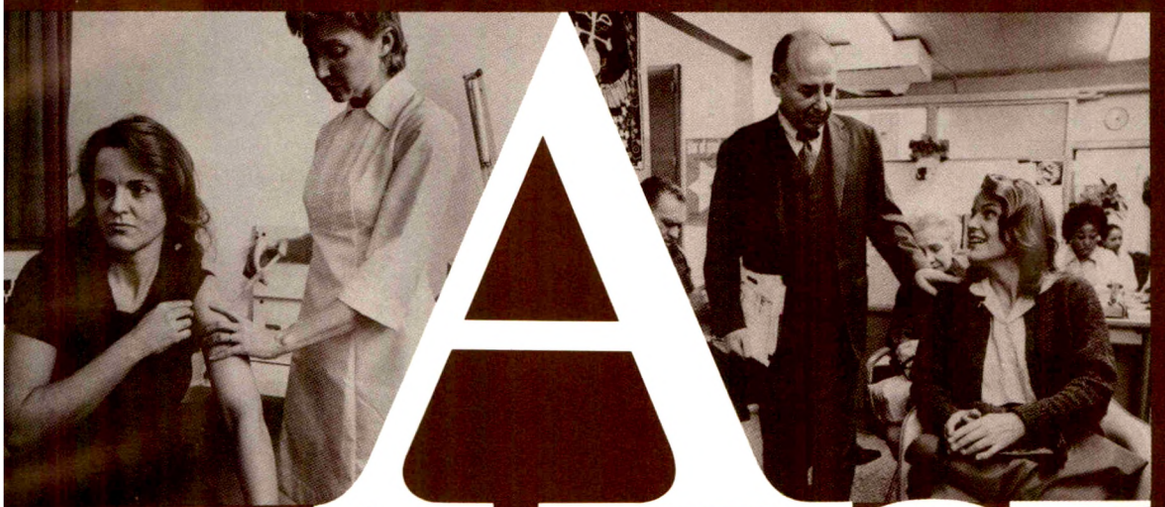
Complete dosage information available in insert which accompanies each package (or on request).

The use of the injectable form is intended for the acutely agitated psychotic patient with moderately severe to very severe symptoms.

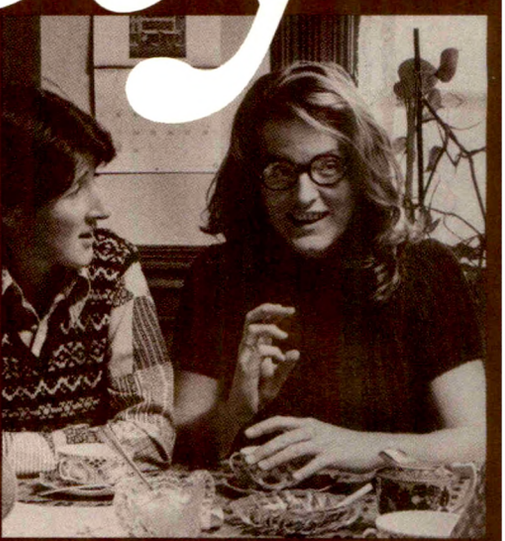
IMPORTANT: Full directions for use should be read before HALDOL (haloperidol) is administered or prescribed. 11/72

McNEIL McNeil Laboratories, Inc.
Fort Washington, Pa. 19034

For schizophrenic patients...



A way out:



...that helps keep them out

Controlled Drug Delivery

with new

PROLIXIN® DECANOATE

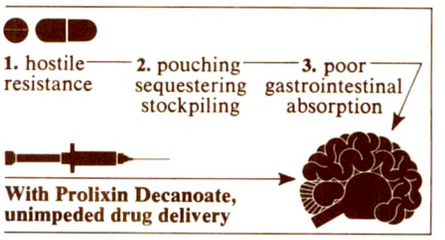
(FLUPHENAZINE DECANOATE INJECTION

Puts control of the schizophrenic in your hands with injections 1 to 3 weeks apart or longer with an average duration of effect of about 2 weeks

Controlled drug delivery — a revolution in patient management

PROLIXIN® DECANOATE (Fluphenazine Decanoate Injection) HELPS ASSURE EFFECTIVE, UNHINDERED MEDICATION

Controlled drug delivery is *physician*-controlled delivery, an effective prophylactic maneuver against disruption of therapy—one of the most common causes of psychotic relapse. Is the patient taking his medication? You know because you administer it or direct others to. Once administered, therapy cannot be altered by the patient, by his family, or by anyone else.



In most patients, symptomatology is controlled by Prolixin Decanoate for periods of two weeks with a single injection. Sequestered medication and similar problems associated with oral therapy are not encountered. Nor does the patient risk drug loss through severe diarrhea or poor gastrointestinal absorption. Prolixin Decanoate keeps the patient medicated...helps make him more amenable to the entire treatment program and improves his chances for rehabilitation and discharge.

The outpatient is vulnerable to the dictates of his own poor judgment. Deluded by a sense of well-being, he may question the need for medication. Family and friends often give him misleading advice. Oral therapy in such a patient encourages missed doses. Medication with Prolixin Decanoate (Fluphenazine Decanoate Injection) helps assure drug delivery when required and in the dosage prescribed. It helps keep the outpatient out.


Missed doses.

FOUR REASONS FOR READMISSION...

For brief summary, see last page of this presentation.

OLIXIN® DECANOATE
uphenazine Decanoate Injection)
SURES ECONOMIC DRUG
:LIVERY...LESS FREQUENT
)SING THAN WITH ORAL
[ERAPY

Controlled drug delivery brings cost therapy down with less hospitaliza-ı, less nursing time, less frequent ıing. Low annual dosage means less t for the hospital, for the patient's ıily, and for the community. It ans a minimum of drug holidays to)id long-term complications, with ir confusing schedules for patient l family.

ntrolled drug delivery — evolution in the treatment of the ıizophrenic patient

OLIXIN® DECANOATE
uphenazine Decanoate Injection)
:LPS ENHANCE LIKELIHOOD
' DISCHARGE

Optimally, the mental hospital)uld be a rehabilitating bridge be-:en life before and life after custo-ıl care. Prolixin Decanoate often)rtens that bridge because getting the)atient out is frequently a matter of :eping him medicated. And 1 injec-n of Prolixin Decanoate means ap-oximately 2 weeks of symptom ntrol. The importance of control by : physician with this injectable can seen in the fact that about 1 out of :ry 5 inpatients does not take his tab-s even when they are administered by nursing staff. With controlled drug delivery, lost or hidden doses are not a problem.

In one study,[1] 24 chronic long-term hospital patients were treated with Prolixin Decanoate in dosages of 12.5 mg. to 75 mg. given every 7 days to 3 weeks. Most of the patients received 25 to 50 mg. per injection. Of these, 13 were discharged after 6 months of treatment, 4 were considered dischargeable, and 7 did not improve. In 12 of the 24 patients who previously had been on different psychotropic drugs for periods of 4 to 96 weeks, improvement with Prolixin Decanoate (Fluphenazine Decanoate Injection) was observed in affect, volition, and higher mental functions. Dischargeability in these patients "may also have been enhanced because the staff, the patient, and the family were assured of an adequate and regular medication intake."[1]

Controlled drug delivery — a revolution in the care of the outpatient

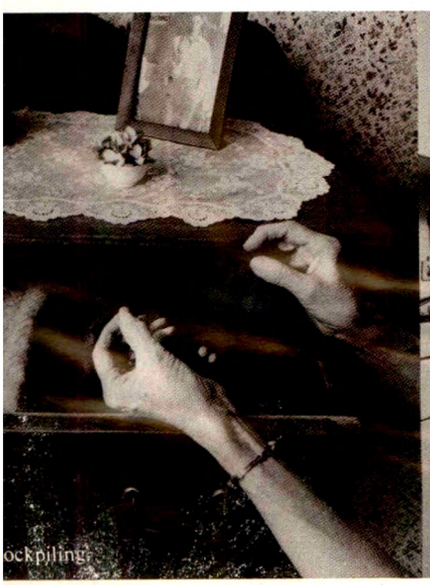
PROLIXIN® DECANOATE
(Fluphenazine Decanoate Injection)
PROMOTES CONTINUITY OF MEDICATION WITH DIMINISHED LIKELIHOOD OF RELAPSE COMPARED WITH ORAL THERAPY

Success in rehabilitative areas like employment and social acceptance depends in large measure on adequate and continuing phenothiazine intake; success in family adjustment no less so. Short-acting medication is not the best path to such success. According to one report,[2] "approximately 50% of all discharged psychotic patients fail to take even the first dose of their outpatient medication." And McClellan and Cowan[3] state that a substantial number of patients taking antipsychotic drugs do so in amounts significantly less than those prescribed. Even once-daily administration does not solve the problem of poor home supervision or the patient's lack of insight into his condition.

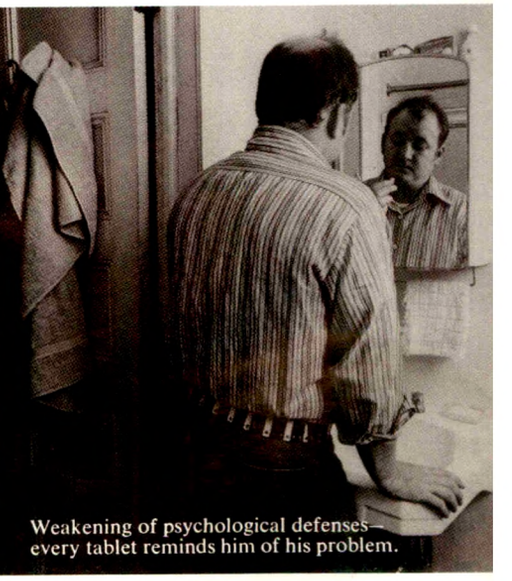
Controlled drug delivery with Prolixin Decanoate (Fluphenazine Decanoate Injection) is an efficient route to continuity of medication, and therefore to long-term remission. For one thing there is less strain on the patient's often tenuous adjustment to family living. Since family members are not responsible for supervising the patient's medical needs, they tend to be more accepting, and better feeling is promoted merely because the controlled delivery regimen demonstrates that improvement is possible. Controlled drug delivery also strengthens the patient's psychological defenses. He is not reminded of his psychiatric illness by multiple daily doses.

The same unique advantages of controlled drug delivery with Prolixin Decanoate that promote the discharge-

(Continued on following page)


ockpiling.


Misleading advice from family and friends.


Weakening of psychological defenses— every tablet reminds him of his problem.

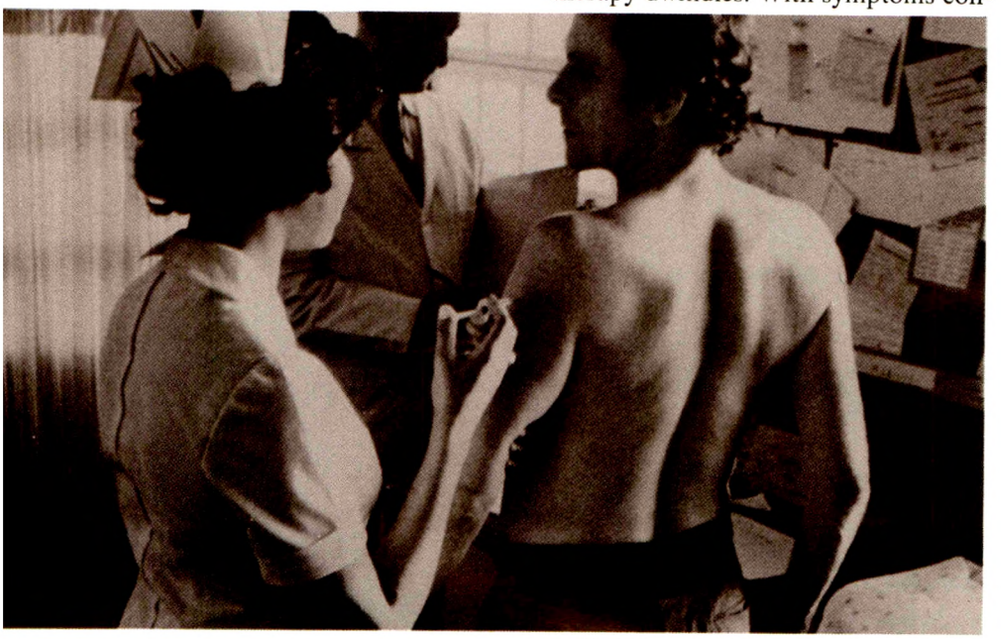
)OD REASONS FOR CONTROLLED DRUG DELIVERY

(Continued from preceding page)
ability of the inpatient and help maintain him in the community are true for the patient who has never been hospitalized. It is just these advantages that will help the physician or psychiatrist keep him in the community without the need for custodial care.

Controlled drug delivery — a revolution in efficiency of administration

PROLIXIN® DECANOATE (Fluphenazine Decanoate Injection) SAVES TIME, REDUCES COST IN THE HOSPITAL, CLINIC, OFFICE

Controlled drug delivery saves time, reduces costs in the hospital. With Prolixin Decanoate there can be no palming, pouching, regurgitating. With Prolixin Decanoate resistance to therapy dwindles. With symptoms controlled, the patient is more manageable, more comfortable, more amenable to the total hospital treatment program. With Prolixin Decanoate only 1 dose visit every 1 to 3 weeks with an average of about 2 weeks is required.





Controlled drug delivery saves time, reduces costs in the clinic and office.

With Prolixin Decanoate less frequ dosing. With Prolixin Decanoate (phenazine Decanoate Injection) n patients report for their injections c once in every 2-week period.

18 PATIENTS	18 PATIENTS
	
8 a.m. ¾ hr. 2 p.m. ¾ hr. 6 p.m. ¾ hr.	1 injection every 14 days f most patients
=2¼ hrs. nursing time	4 minutes required for eac injection (appro
2¼ hrs. × 14 days **=31½ hrs. of nursing time every 14 days**	**=1 hr. 10 minut nursing time in 14 days**
NURSING TIME SAVED IN 14 DAY 30 hours, 20 minutes[4]	

Controlled drug delivery — a revolution in convenience of administration

PROLIXIN® DECANOATE (Fluphenazine Decanoate Injection MAY BE DELIVERED IN EASY-TO-USE UNIMATIC® SYRINGES

Prolixin Decanoate may be gi intramuscularly or subcutaneou Local tissue reactions occur only ra

A dry syringe and needle of at le 21 gauge should be used. Use of a needle or syringe may cause the s tion to become cloudy. Prolixin D noate is available in vials of 5 cc. a in Unimatic single-dose preassemb syringes and in Unimatic cartri needle units with a reusable-pla holder.

N.B. Extrapyramidal reactions cur frequently. Most often they are versible and can usually be control by administration of antiparkinson drugs. However, in some instan they are persistent (see Adverse actions section of Brief Summa Patients should be forewarned a reassured.

Reference: 1. Keskiner, A. et al.: Arch. Psychiatry 18:477, Apr. 1968. 2. Goldb H. L., DiMascio, A. and Chaudhary, B.: chosomatics 11:173, May-June 1970. 3. Clellan, T. A. and Cowan, G.: BRI COMMUNICATIONS. Am. J. Psychia 126:1771, June 1970. 4. Platt, R.: Br. J. Psychiatry 2:187, 1968.

For Brief Summary, see opposite pa

Controlled Drug Delivery

in schizophrenia with new

PROLIXIN® DECANOATE

(FLUPHENAZINE DECANOATE INJECTION)

BRIEF SUMMARY

Prolixin Decanoate (Fluphenazine Decanoate Injection) provides 25 mg. fluphenazine decanoate per cc. in a sesame oil vehicle with 1.2% (w/v) benzyl alcohol as a preservative.

CONTRAINDICATIONS: In presence of suspected or established subcortical brain damage. In patients who have a blood dyscrasia, liver damage or renal insufficiency, or who are receiving large doses of hypnotics, or who are comatose or severely depressed. In patients who have shown hypersensitivity to fluphenazine; cross-sensitivity to phenothiazine derivatives may occur.

Not intended for use in children under 12.

WARNINGS: Mental and physical abilities required for driving a car or operating heavy machinery may be impaired by use of this drug. Physicians should be alert to the possibility that severe adverse reactions may occur which require immediate medical attention. Potentiation of effects of alcohol may occur. Safety for use during pregnancy has not been established; weigh possible hazards against potential benefits if administered during pregnancy.

PRECAUTIONS: Caution must be exercised if another phenothiazine compound caused cholestatic jaundice, dermatoses or other allergic reactions because of the possibility of cross-sensitivity. When psychotic patients on large doses of a phenothiazine drug are to undergo surgery, hypotensive phenomena should be watched for; less anesthetics or central nervous system depressants may be required. Because of added anti-cholinergic effects, fluphenazine may potentiate the effects of atropine.

Use fluphenazine decanoate cautiously in patients exposed to extreme heat or phosphorus insecticides; in patients with ulcer disease history since aggravation of peptic ulcer has occurred; in patients with history of convulsive disorders since grand mal convulsions have occurred; and in patients with special medical disorders such as mitral insufficiency or other cardiovascular diseases, and pheochromocytoma. Bear in mind that with prolonged therapy there is the possibility of liver damage, pigmentary retinopathy, lenticular and corneal deposits, and development of irreversible dyskinesia.

Fluphenazine decanoate should be administered under the direction of a physician experienced in the clinical use of psychotropic drugs. Periodic checking of hepatic and renal functions and blood picture should be done. Renal function of patients on long-term therapy should be monitored; if BUN becomes abnormal, treatment should be discontinued. "Silent pneumonias" are possible.

ADVERSE REACTIONS: *Central Nervous System*—Extrapyramidal symptoms are most frequently reported. These include pseudoparkinsonism, dystonia, dyskinesia, akathisia, oculogyric crises, opisthotonos, and hyperreflexia; most often these are reversible, but they may be persistent. One can expect a higher incidence of such reactions with fluphenazine decanoate than with less potent piperazine derivatives or straight-chain phenothiazines. The incidence and severity will depend more on individual patient sensitivity, but dosage level and patient age are also determinants. As these reactions may be alarming, the patient should be forewarned and reassured. These reactions can usually be controlled by administration of anti-parkinsonian drugs such as benztropine mesylate or intravenous Caffeine and Sodium Benzoate Injection U.S.P., and by subsequent reduction in dosage. A persistent and sometimes irreversible pseudo-parkinsonian syndrome may develop with chronic administration of phenothiazine compounds. Rhythmic, stereotyped dyskinetic involuntary movements, particularly of the face, mouth, tongue and jaw occur, and may be accompanied by choreiform movements of the limbs. The symptoms persist after drug withdrawal. Antiparkinsonian agents are seldom of benefit. The risk appears to be greatest in elderly females with organic brain damage receiving large and prolonged doses. Phenothiazine derivatives have been known to cause restlessness, excitement, or bizarre dreams and reactivation or aggravation of psychotic processes may be encountered. If drowsiness or lethargy occur, the dosage may have to be reduced. Dosages, far in excess of the recommended amounts, may induce a catatonic-like state.

Autonomic Nervous System—Hypertension and fluctuations in blood pressure have been reported. Although hypotension is rarely a problem, patients with pheochromocytoma, cerebral vascular or renal insufficiency or severe cardiac reserve deficiency such as mitral insufficiency appear to be particularly prone to this reaction and should be observed carefully. Supportive measures including intravenous vasopressor drugs should be instituted immediately should severe hypotension occur; Levarterenol Bitartrate Injection U.S.P. is the most suitable drug; *epinephrine should not be used* since phenothiazine derivatives have been found to reverse its action. Nausea, loss of appetite, salivation, polyuria, perspiration, dry mouth, headache and constipation may occur. Reducing or temporarily discontinuing the dosage will usually control these effects. Blurred vision, glaucoma, bladder paralysis, fecal impaction, paralytic ileus, tachycardia or nasal congestion have occurred in some patients on phenothiazine derivatives.

Metabolic and Endocrine—Weight change, peripheral edema, abnormal lactation, gynecomastia, menstrual irregularities, false results on pregnancy tests, impotency in men and increased libido in women have occurred in some patients on phenothiazine therapy.

Allergic Reactions—Itching, erythema, urticaria, seborrhea, photosensitivity, eczema and exfoliative dermatitis have been reported with phenothiazines. The possibility of anaphylactoid reactions should be borne in mind.

Hematologic—Blood dyscrasias including leukopenia, agranulocytosis, thrombocytopenic or nonthrombocytopenic purpura, eosinophilia, and pancytopenia have been observed with phenothiazines. If soreness of the mouth, gums or throat or any symptoms of upper respiratory infection occur and confirmatory leukocyte count indicates cellular depression, therapy should be discontinued and other appropriate measures instituted immediately.

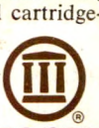
Hepatic—Liver damage manifested by cholestatic jaundice, particularly during the first months of therapy, may occur; treatment should be discontinued. A cephalin flocculation increase, sometimes accompanied by alterations in other liver function tests, has been reported in patients who have had no clinical evidence of liver damage.

Others—Sudden deaths have been reported in hospitalized patients on phenothiazines. Previous brain damage or seizures may be predisposing factors. High doses should be avoided in known seizure patients. Shortly before death, several patients showed flare-ups of psychotic behavior patterns. Autopsy findings have usually revealed acute fulminating pneumonia or pneumonitis, aspiration of gastric contents, or intramyocardial lesions. Although not a general feature of fluphenazine, potentiation of central nervous system depressants such as opiates, analgesics, antihistamines, barbiturates, and alcohol may occur.

Hypotension severe enough to cause fatal cardiac arrest, altered electrocardiographic and electroencephalographic tracings, altered cerebrospinal fluid proteins, cerebral edema, asthma, laryngeal edema, and angioneurotic edema; with long-term use, skin pigmentation and lenticular and corneal opacities have occurred with phenothiazines. Local tissue reactions occur only rarely with injections of fluphenazine decanoate.

For full prescribing information, consult package insert.

Supply: 1 cc. Unimatic® single dose preassembled syringes and cartridge-needle units, and 5 cc. vials.



SQUIBB HOSPITAL DIVISION

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Princeton, N.J. 08540

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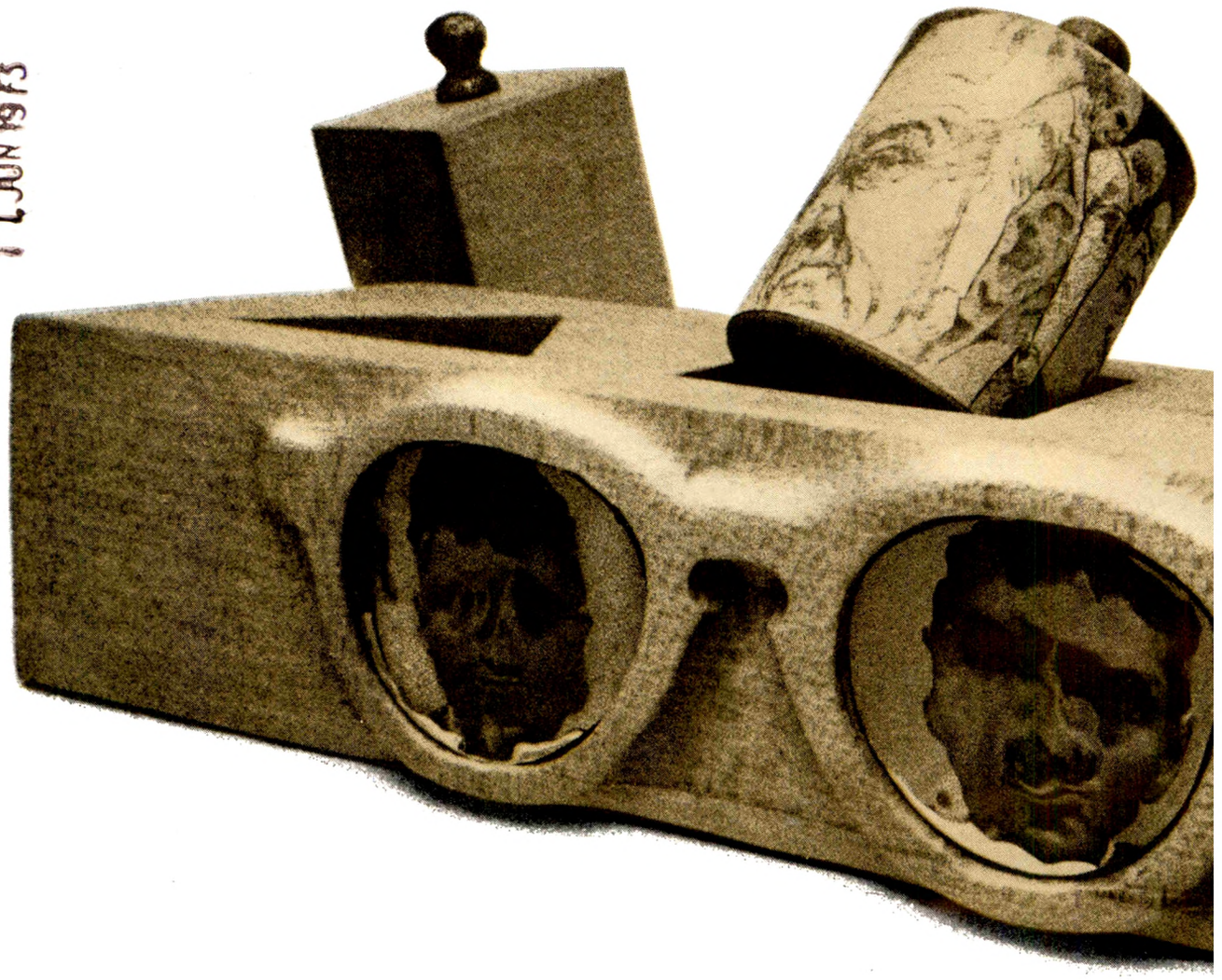
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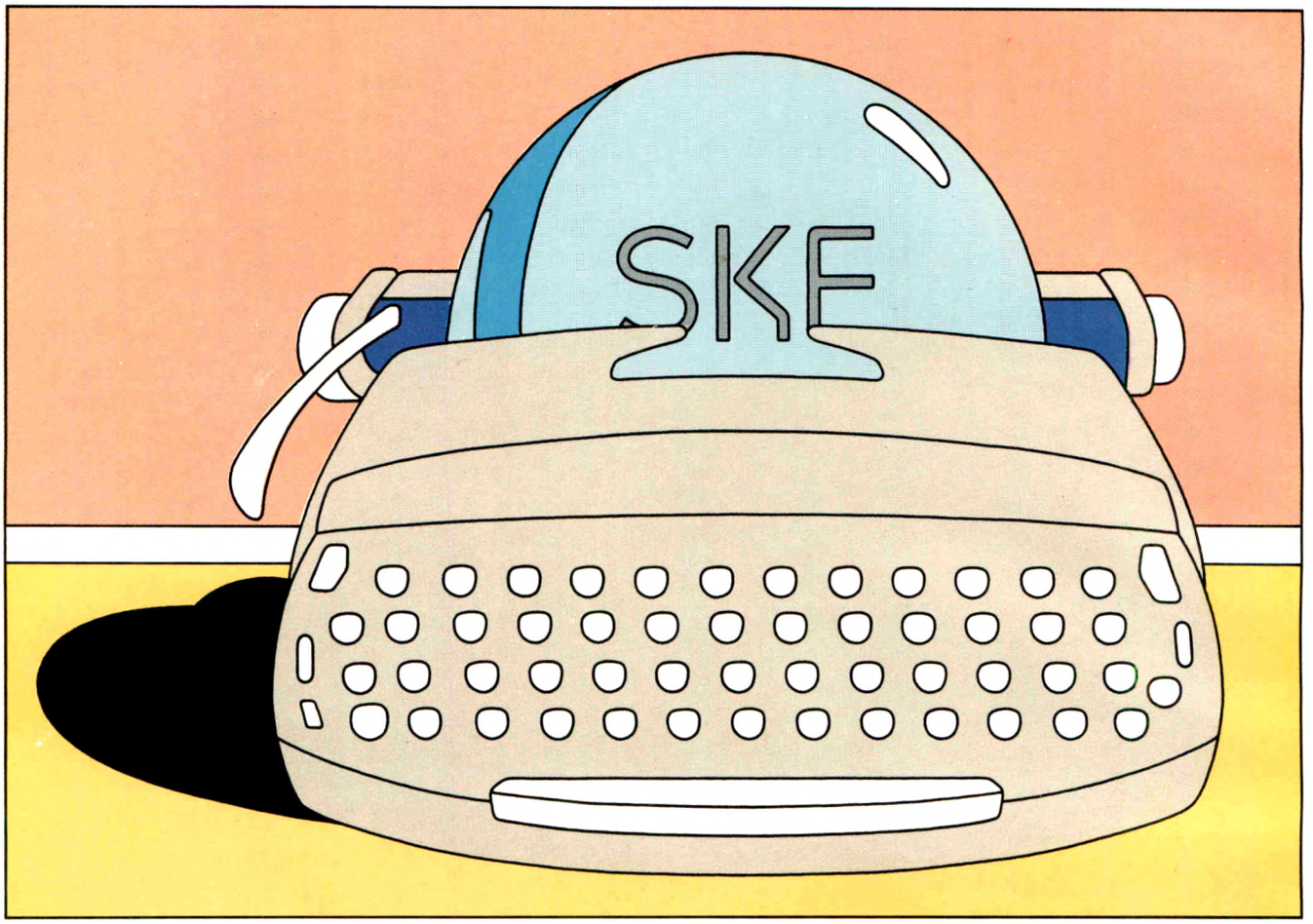
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1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5

In the course of a four-week trial,** the investigator studied the effects of Valium (diazepam) in 21 psychoneurotic patients, all with marked anxiety and tension and most with associated depressive symptoms. The Valium daily dosage was 15 mg in divided doses, throughout, except for two patients who required a doubling of daily dosage (30 mg). The medication supplemented psychotherapy.

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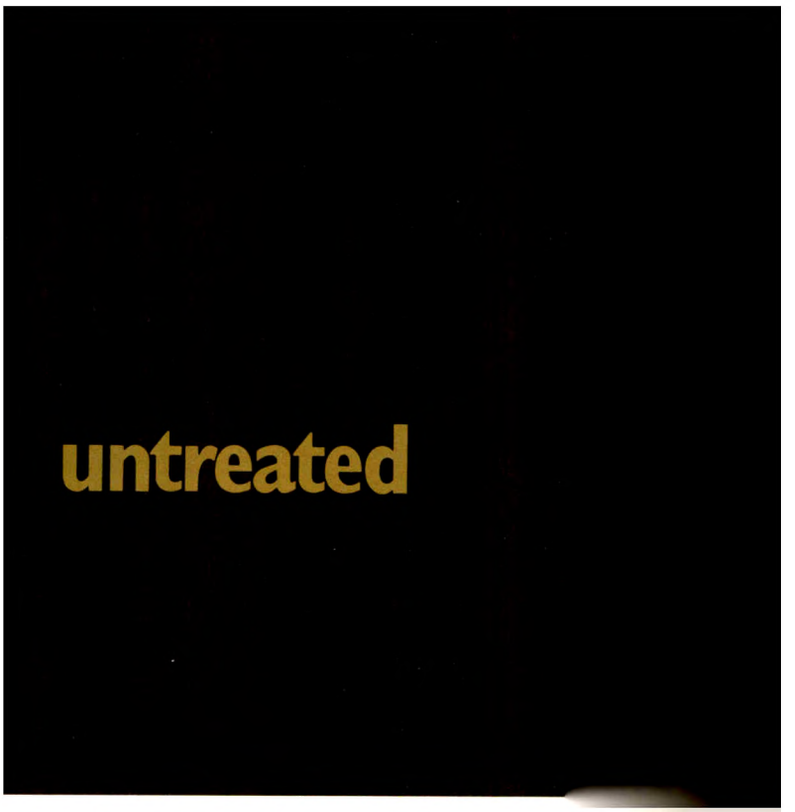
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Type set by Bru-El Graphic, Inc., 5265 Port Royal Road, Springfield, Va. 22151.

Printed by Dartmouth Printing Co., 69 Lyme Road, Hanover, N.H. 03755.

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Indexed in *Abstracts for Social Workers, Biological Abstracts, Chemical Abstracts, Cumulative Index to Nursing Literature, Excerpta Medica, Hospital Literature Index, Index Medicus, International Nursing Index, Nutrition Abstracts,* and *Psychological Abstracts.*

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1. Berne E: Principles of Group Treatment. New York, Oxford University Press, 1966, p 26
2. Schildkraut JJ: Tranylcypromine: effects on norepinephrine metabolism in rat brain. Am J Psychiatry 126:925–931, 1970
3. Blackwell B, Marley E, Price J, et al: Hypertensive interactions between monoamine oxidase inhibitors and foodstuffs. Br J Psychiatry 113:349–365, 1967
4. Brosin H: Communication systems of the consultation process, in The Psychiatric Consultation. Edited by Mendel W, Solomon P. New York, Grune & Stratton, 1968, pp 1–12

Tables and figures. Titles and headings of any tables and figures should be sufficiently clear that the meaning of the data is understandable without reference to the text. See recent issues of the *Journal* for the general requirements of style.

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Change in Symptom Severity in a Double-Blind Evaluation of Serentil (mesoridazine)—516 Patients (from 1=Not Present to 7=Extremely Severe)
7
6
5
4
3
2
1
Pre-Dryout Mean 3.59
Post-Dryout Mean 3.74
Serentil Mean 2.99
The above is based on the Brief Psychiatric Rating Scale. The difference between the Serentil mean and each of the other scores is statistically significant. Clinical data (based on 17 double-blind studies) on file, Medical Library, Sandoz Pharmaceuticals, East Hanover, N.J.
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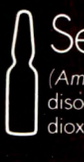
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EMOTIONAL WITHDRAWAL
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One or more of these symptoms in a schizophrenic is an indication for



Contraindications: Severe central nervous system depression, comatose states, hypersensitivity.

Warnings: Increase dosage gradually to patients participating in activities requiring complete mental alertness (e.g., driving). The safety of this drug in pregnancy has not been established; hence, it should be given only when the anticipated benefits to be derived from treatment exceed the possible risks to mother and fetus. Use in children under 12 is not recommended. Phenothiazines are capable of potentiating central nervous system depressants as well as atropine and phosphorus insecticides.

Precautions: Ocular changes (seen with other phenothiazines) have not been seen with Serentil (mesoridazine). Because of possible hypotensive reactions, caution in parenteral use is required. Reserve parenteral administration for bedfast patients or for acute ambulatory cases, and keep patient lying down for at least ½ hour after injection. Leukopenia and/or agranulocytosis have been attributed to phenothiazine therapy. Blood dyscrasia (seen with other phenothiazines) has occurred in a single case of transient granulocytopenia.

Adverse Reactions: Serentil (mesoridazine) has demonstrated a remarkably low incidence of adverse reactions when compared with other phenothiazine compounds. *Central Nervous System:* Drowsiness, Parkinson's syndrome, dizziness, weakness, tremor, restlessness, ataxia, dystonia, rigidity, slurring, akathisia, motoric reactions (opisthotonos). *Autonomic Nervous System:* Dry mouth, nausea and vomiting, fainting, stuffy nose, photophobia, constipation and blurred vision. *Endocrine System:* Inhibition of ejaculation and lactation have been noted rarely. *Skin:* Itching, rash, hypertrophic papillae of the tongue and angioneurotic edema. *Cardiovascular System:* Hypotension, tachycardia, EKG changes.

The following reactions have occurred with phenothiazines and should be considered: *Autonomic Reactions*—Miosis, obstipation, anorexia, paralytic ileus. *Cutaneous Reactions*—Erythema, exfoliative dermatitis, contact dermatitis. *Blood Dyscrasias*—Agranulocytosis, leukopenia, eosinophilia, thrombocytopenia, anemia, aplastic anemia, pancytopenia. *Allergic Reactions*—Fever, laryngeal edema, angioneurotic edema, asthma. *Hepatotoxicity*—Jaundice, biliary stasis. *Cardiovascular Effects*—Changes in terminal portion of electrocardiogram, including prolongation of Q-T interval, lowering and inversion of T-wave, and appearance of a wave tentatively identified as a bifid T or a U wave have been observed with phenothiazines, including Serentil (mesoridazine); these appear to be reversible and due to altered repolarization, not myocardial damage. There is no evidence that these changes are precursors of any significant disturbance of cardiac rhythm. Hypotension, rarely resulting in cardiac arrest. *Extrapyramidal Symptoms*—Akathisia, agitation, motor restlessness, dystonic reactions, trismus, torticollis, opisthotonos, oculogyric crises, tremor, muscular rigidity, and akinesia, occasionally persisting for several months or years especially in elderly patients with brain damage. *Endocrine Disturbances*—Menstrual irregularities, altered libido, gynecomastia, weight gain, false positive pregnancy tests. *Urinary Disturbances*—Retention, incontinence. *Others*—Hyperpyrexia, behavioral effects suggestive of a paradoxical reaction, including excitement, bizarre dreams, aggravation of psychoses, and toxic confusional states; following long-term treatment, a peculiar skin-eye syndrome marked by progressive pigmentation of skin or conjunctiva and/or accompanied by discoloration of exposed sclera and cornea; stellate or irregular opacities of anterior lens and cornea.

Dosage and Administration: ORAL: Should be adjusted to needs of the individual. Lowest effective dosage should always be used. When maximum response is achieved, dosage may be reduced gradually to maintenance level. *Schizophrenia:* For most patients, regardless of severity, starting dose of 50 mg. t.i.d. recommended. Usual optimum total daily dose range 100-400 mg. *Behavioral Problems in Mental Deficiency and Chronic Brain Syndrome:* For most patients starting dose of 25 mg. t.i.d. recommended. Usual optimum total daily dose range 75-300 mg. *Alcoholism:* For most patients usual starting dose is 25 mg. b.i.d. Usual optimum total daily dose range 50-200 mg. *Psychoneurotic Manifestations:* For most patients usual starting dose is 10 mg. t.i.d. Usual optimum total daily dose range 30-150 mg. INJECTABLE FORM: For situations in which an intramuscular form of medication is indicated. For most patients a starting dose of 25 mg. is recommended, to be repeated in 30-60 minutes if necessary. Usual optimum total daily dose range 25-200 mg.

Before prescribing, consult package circular.

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May 1973

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Before prescribing, see complete prescribing information including dosage and symptoms and treatment of overdosage, in SK&F literature or *PDR*.

Indications

Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: For the management of manifestations of psychotic disorders.

Probably effective: For control of the manifestations of manic-depressive illness (manic phase). For the control of moderate to severe agitation, hyperactivity or aggressiveness in disturbed children.

Possibly effective: For control of excessive anxiety, tension and agitation as seen in neuroses.

Final classification of the less-than-effective indications requires further investigation.

Contraindications: Comatose states, presence of large amounts of C.N.S. depressants, or bone marrow depression.

Warnings: Avoid using in patients hypersensitive (e.g., blood dyscrasia, jaundice) to any phenothiazine. Caution patients about activities requiring alertness (e.g., operating vehicles or machinery), especially during the first few days' therapy. Avoid concomitant use with alcohol. May counteract antihypertensive effect of guanethidine and related compounds.

Use in pregnancy only when essential. There are reported instances of jaundice or prolonged extrapyramidal signs in newborn whose mothers had received chlorpromazine.

Precautions: Use cautiously in persons with cardiovascular, liver or chronic respiratory disease, or with acute respiratory infections. Due to cough reflex suppression, aspiration of vomitus is possible. May prolong or intensify the action of C.N.S. depressants, organophosphorus insecticides, heat, atropine and related drugs. (Reduce dosage of concomitant C.N.S. depressants.) Anticonvulsant action of barbiturates is not intensified. Antiemetic effect may mask signs of toxic drug overdosage or physical disorders. Discontinue high-dose, long-term therapy gradually.

Patients on long-term therapy, especially high doses, should be evaluated periodically for possible adjustment or discontinuance of drug therapy.

Adverse Reactions: Drowsiness, cholestatic jaundice, agranulocytosis, eosinophilia, leukopenia, hemolytic anemia, thrombocytopenic purpura and pancytopenia; postural hypotension, tachycardia, fainting, dizziness and, occasionally, a shock-like condition; reversal of epinephrine effects; EKG changes have been reported, but relationship to myocardial damage is not confirmed; neuromuscular (extrapyramidal) reactions; pseudoparkinsonism, motor restlessness, dystonias, persistent tardive dyskinesia, hyperreflexia in the newborn; psychotic symptoms, catatonic-like states, cerebral edema; convulsive seizures; abnormality of the cerebrospinal fluid proteins; urticarial reactions and photosensitivity, exfoliative dermatitis, contact dermatitis; lactation and breast engorgement (in females on large doses), false positive pregnancy tests, amenorrhea, gynecomastia; hyperglycemia, hypoglycemia, glycosuria; dry mouth, nasal congestion, constipation, adynamic ileus, urinary retention, miosis, mydriasis; after prolonged substantial doses, skin pigmentation, epithelial keratopathy, lenticular and corneal deposits and pigmentary retinopathy, visual impairment; mild fever (after large I.M. dosage); hyperpyrexia; increased appetite and weight; a systemic lupus erythematosus-like syndrome; peripheral edema. NOTE: Sudden death in patients taking phenothiazines (apparently due to cardiac arrest or asphyxia due to failure of cough reflex) has been reported, but no causal relationship has been established.

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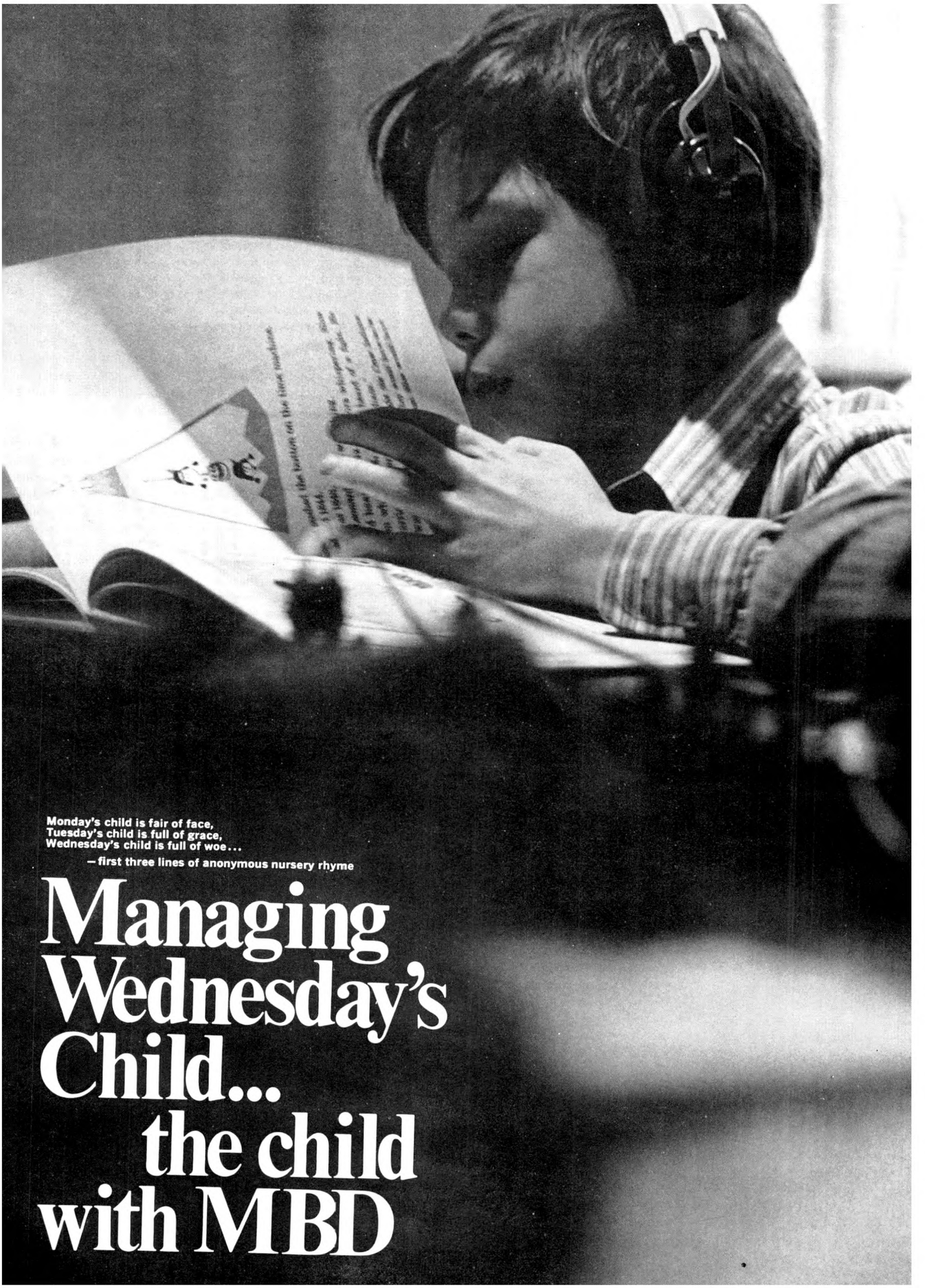
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Monday's child is fair of face,
Tuesday's child is full of grace,
Wednesday's child is full of woe...

—first three lines of anonymous nursery rhyme

Managing Wednesday's Child... the child with MBD

Wednesday's child is full of woe

It need not be this way for the MBD child.

He can learn and adjust if given a helping hand.

Without help, the MBD child may be a slow reader, can find writing difficult, and arithmetic hard to grasp. He may be excitable, and his actions can be disruptive. The result can seriously hamper his educational and social development.

But, properly diagnosed and treated, MBD – Minimal Brain Dysfunction – can be brought under control so that the afflicted child can develop normally.

And Ritalin can play an important part in the total rehabilitation program of the MBD child, which includes remedial measures at home and at school. It's currently the drug of choice in many MBD situations.[1]



Ritalin is well tolerated. It can help control the excessive motor activity of the MBD child and ameliorate behavioral and learning problems.

Of course, Ritalin is not indicated for childhood personality and behavioral disorders not associated with MBD.

Reference
1. Charlton, M. H.: Paper presented at the Annual Convention of the Medical Society of the State of New York, New York, N.Y., Feb. 7, 1971.

Ritalin® hydrochloride ©
(methylphenidate hydrochloride)

TABLETS

INDICATION
Minimal Brain Dysfunction in Children—as adjunctive therapy to other remedial measures (psychological, educational, social)
Special Diagnostic Considerations
Specific etiology of Minimal Brain Dysfunction (MBD) is unknown, and there is no single diagnostic test. Adequate diagnosis requires the use not only of medical but of special psychological, educational, and social resources.
The characteristic signs most often observed are chronic history of short attention span, distractibility, emotional lability, impulsivity, and moderate to severe hyperactivity; specific learning disabilities; perceptual motor impairment; minor neurological signs and abnormal EEG. The diagnosis of MBD must be based upon a complete history and evaluation of the child and not solely on the presence of one or more of these signs.
Drug treatment is not indicated for all children with MBD. Appropriate educational placement is essential and psychological or social intervention may be necessary. When remedial measures alone are insufficient, the decision to prescribe stimulant medication will depend upon the physician's assessment of the chronicity and severity of the child's symptoms.

CONTRAINDICATIONS
Marked anxiety, tension, and agitation, since Ritalin may aggravate these symptoms. Also contraindicated in patients known to be hypersensitive to the drug and in patients with glaucoma.

WARNINGS
Ritalin is not recommended for children under six years, since safety and efficacy in this age group have not been established.
Since sufficient data on safety and efficacy of long-term use of Ritalin in children with minimal brain dysfunction are not yet available, those requiring long-term therapy should be carefully monitored.
Ritalin should not be used for severe depression of either exogenous or endogenous origin or for the prevention of normal fatigue states.
Ritalin may lower the convulsive threshold in patients with or in absence of seizures. Safe concomitant use of anticonvulsants and Ritalin has not been established. If seizures occur, Ritalin should be discontinued.
Use cautiously in patients with hypertension.

Drug Interactions
Ritalin may decrease the hypotensive effect of guanethidine. Use cautiously with pressor agents and MAO inhibitors. Ritalin may inhibit the metabolism of coumarin anticoagulants, anticonvulsants (phenobarbital diphenylhydantoin, primidone), phenylbutazone, and tricyclic antidepressants (imipramine, desipramine). Downward dosage adjustments of these drugs may be required when given concomitantly with Ritalin.

Usage in Pregnancy
Adequate animal reproduction studies to establish safe use of Ritalin during pregnancy have not been conducted. Therefore, until more information is available, Ritalin should not be prescribed for women of childbearing age unless, in the opinion of the physician, the potential benefits outweigh the possible risks.

Drug Dependence
Ritalin should be given cautiously to emotionally unstable patients, such as those with a history of drug dependence or alcoholism, because such patients may increase dosage on their own initiative.
Chronically abusive use can lead to marked tolerance and psychic dependence with varying degrees of abnormal behavior. Frank psychotic episodes can occur, especially with parenteral abuse. Careful supervision is required during drug withdrawal, since severe depression as well as the effects of chronic overactivity can be unmasked. Long-term follow-up may be required because of the patient's basic personality disturbances.

PRECAUTIONS
Patients with an element of agitation may react adversely; discontinue therapy if necessary.
Periodic CBC and platelet counts are advised during prolonged therapy.

ADVERSE REACTIONS
Nervousness and insomnia are the most common adverse reactions but are usually controlled by reducing dosage and omitting the drug in the afternoon or evening. Other reactions include: hypersensitivity (including skin rash, urticaria, fever, arthralgia, exfoliative dermatitis, and erythema multiforme with histopathological findings of necrotizing vasculitis); anorexia; nausea; dizziness; palpitations; headache; dyskinesia; drowsiness; blood pressure and pulse changes, both up and down; tachycardia; angina; cardiac arrhythmias; abdominal pain; weight loss during prolonged therapy. In children, loss of appetite, abdominal pain, weight loss during prolonged therapy, insomnia, and tachycardia may occur more frequently. Toxic psychosis has been reported.

DOSAGE AND ADMINISTRATION
Children with Minimal Brain Dysfunction (6 years and over)
Start with small doses (*eg*, 5 mg before breakfast and lunch) with gradual increments of 5 to 10 mg weekly. Daily dosage above 60 mg is not recommended. If improvement is not observed after appropriate dosage adjustment over a one-month period, the drug should be discontinued.
If paradoxical aggravation of symptoms or other adverse effects occur, reduce dosage, or, if necessary, discontinue the drug.
Ritalin should be periodically discontinued to assess the child's condition. Improvement may be sustained when the drug is either temporarily or permanently discontinued.
Drug treatment should not and need not be indefinite and usually may be discontinued after puberty.

HOW SUPPLIED
Tablets, 20 mg (peach, scored); bottles of 100 and 1000.
Tablets, 10 mg (pale green, scored); bottles of 100, 500, 1000 and Strip Dispensers of 100.
Tablets, 5 mg (pale yellow); bottles of 100, 500, and 1000.

Consult complete product literature before prescribing.

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The stereotype image of "psychiatrist and couch" is an anachronism because today's psychiatrist is called on to diagnose and treat depression in a variety of clinical settings. And when an antidepressant medication is chosen, it must be as flexible and as adaptable as the physician prescribing it.



The psychiatrist's office still represents the setting in which the psychoanalytic process recognizes its fullest potential. Frequently, however, an antidepressant must be employed to foster a working therapeutic relationship. With effective symptomatic relief often provided by ELAVIL® (Amitriptyline HCl, MSD), depressed patients may be able to concentrate on underlying factors instead of somatic manifestations.

The general hospital today usually provides a psychiatric unit where depressed patients are treated. Here, too, the symptomatic relief ELAVIL often provides can be a valuable part of total treatment. As depressive symptoms are relieved, for example, patients may take advantage of the therapeutic activities offered and, even more important, may be discharged sooner and treated on an outpatient basis.



In the outpatient clinic, where follow-up treatment may be necessary for three months or longer, ELAVIL is highly effective in maintaining relief, especially in patients who responded well to higher doses while hospitalized. As a result, these patients may continue to function in their daily activities.



In the mental hospital, severely depressed patients present challenges for psychiatrist and staff alike. Here, the usefulness of ELAVIL is increased by the 50-mg tablet that provides the higher doses often required and by the injectable form for more rapid effect.



The community mental health center, a remarkable innovation in the field of modern psychiatry, offers a unique setting for treating patients with clinically significant depression. Here, too, ELAVIL often proves to be a true asset to the psychiatrist by providing highly effective symptomatic relief that can encourage communication, support the psychotherapeutic relationship, and accelerate the achievement of desired therapeutic goals.

in the treatment of depression

TABLETS: 10 mg, 25 mg, and 50 mg INJECTION: 10 mg per ml

ELAVIL®

(AMITRIPTYLINE HCl | MSD)

helps open many doors

For a brief summary of prescribing information, please see following page.

MSD
MERCK SHARP & DOHME

addendum

ELAVIL®
(AMITRIPTYLINE HCl | MSD)
dosage forms for differing patient needs

25 mg (yellow)



This tablet may prove useful for most outpatients, who generally do well on 25 mg three times a day. This dosage may be increased to a total of 150 mg a day. Dosage increases are made preferably in the late afternoon or at bedtime. The sedative effect may be apparent before the antidepressant effect is noted. An adequate therapeutic effect may take as long as 30 days to develop.

50 mg (beige)



The 50-mg tablet may be indicated whenever higher dosages are required, as for example when increases are necessary in the late afternoon or bedtime doses. It may also be convenient for many hospitalized patients who may need 100 mg a day initially. In these patients, dosage may be increased gradually to 200 mg a day if necessary. A small number of hospitalized patients may need as much as 300 mg a day.

10 mg (blue)



Because lower doses are generally recommended for adolescents and elderly patients, the 10-mg tablets may be most serviceable. Ten mg three times a day with 20 mg at bedtime may be satisfactory in adolescent and elderly patients who do not tolerate higher dosages.

INJECTION
10 mg per ml



For patients unable or unwilling to take tablets, the injectable form may be suitable initially. The tablets should replace the injection as soon as possible. Initial intramuscular dosage is 20 to 30 mg (2 to 3 ml) four times a day. When Injection ELAVIL is administered intramuscularly, the effects may appear more rapidly than with oral administration.

Usage in Children: In view of the lack of experience in children, this drug is not recommended at the present time for patients under 12 years of age.

a monoamine oxidase inhibitor or within at least 14 days following the discontinuance of a monoamine oxidase inhibitor since hyperpyretic crises, severe convulsions, and deaths have occurred. When used to replace a monoamine oxidase inhibitor, initiate dosage of amitriptyline HCl cautiously with gradual increase in dosage until optimum response is achieved. Not recommended during the acute recovery phase following myocardial infarction or for patients under 12 years of age.

Warnings: May block the antihypertensive action of guanethidine or similarly acting compounds. Should be used with caution in patients with a history of seizures or urinary retention, or with angle-closure glaucoma or increased intraocular pressure. Patients with cardiovascular disorders should be watched closely; arrhythmias, sinus tachycardia, and prolongation of the conduction time have been reported, particularly with high doses; myocardial infarction and stroke have been reported with drugs of this class. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. May impair mental and/or physical abilities required for performance of hazardous tasks, such as operating machinery or driving a motor vehicle. Safe use during pregnancy and lactation has not been established; in pregnant patients, nursing mothers, or women who may become pregnant, weigh possible benefits against possible hazards to mother and child.

Precautions: Schizophrenic patients may develop increased symptoms of psychosis; patients with paranoid symptomatology may have an exaggeration of such symptoms; manic depressive patients may experience a shift to the manic phase. In these circumstances, the dose of amitriptyline HCl may be reduced or a major tranquilizer, such as perphenazine, may be administered concurrently.

When given with anticholinergic agents or sympathomimetic drugs, close supervision and careful adjustment of dosages are required. Use cautiously in patients receiving large doses of ethchlorvynol, since transient delirium has been reported on concurrent administration. May enhance the response to alcohol and the effects of barbiturates and other CNS depressants. The possibility of suicide in depressed patients remains during treatment and until significant remission occurs; this type of patient should not have easy access to large quantities of the drug. Concurrent electroshock therapy may increase the hazards associated with such therapy; such treatment should be limited to patients for whom it is essential. When possible, discontinue the drug several days before elective surgery. Both elevation and lowering of blood sugar levels have been reported.

Adverse Reactions: *Note:* Included in this listing are a few adverse reactions not reported with this specific drug. However, pharmacological similarities among the tricyclic antidepressant drugs require that each reaction be considered when amitriptyline is administered. *Cardiovascular:* Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus. *Anticholinergic:* Dry mouth, blurred vision, disturbance of accommodation, constipation, paralytic ileus, urinary retention, dilatation of urinary tract. *Allergic:* Skin rash, urticaria, photosensitization, edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis, leukopenia, eosinophilia, purpura, thrombocytopenia. *Gastrointestinal:* Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, parotid swelling, black tongue. *Endocrine:* Testicular swelling and gynecomastia in the male, breast enlargement and galactorrhea in the female, increased or decreased libido, elevation and lowering of blood sugar levels. *Other:* Dizziness, weakness, fatigue, headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, drowsiness, jaundice, alopecia. *Withdrawal Symptoms:* Abrupt cessation of treatment after prolonged administration may produce nausea, headache, and malaise; these are not indicative of addiction.

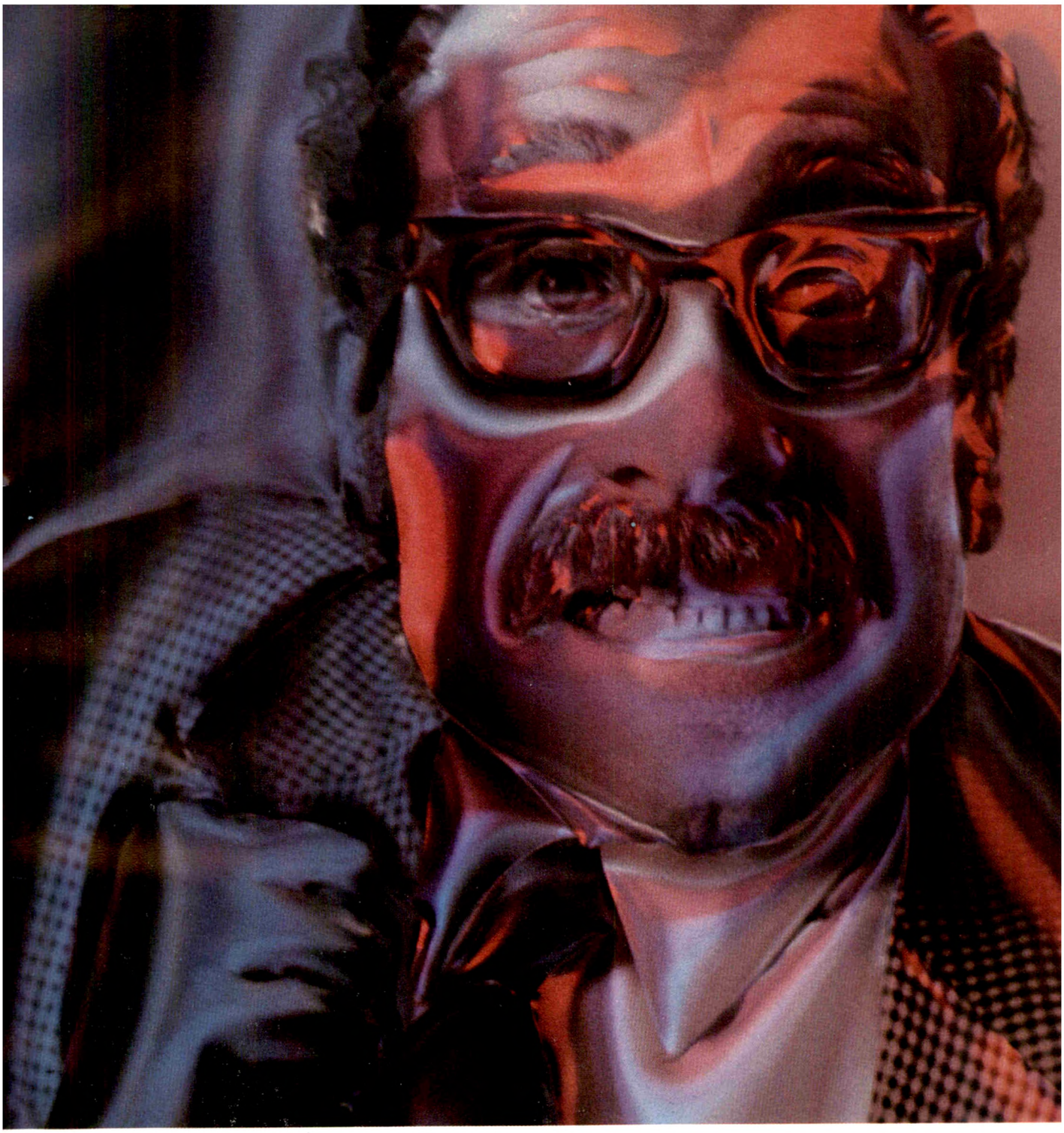
Overdosage: The intravenous administration of 1–3 mg of physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning.

How Supplied: Tablets containing 10 mg and 25 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100, 1000, and 5000; tablets containing 50 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100 and 1000; for intramuscular use, in 10-ml vials containing per ml: 10 mg amitriptyline HCl, 44 mg dextrose, 1.5 mg methylparaben and 0.2 mg propylparaben as preservatives, and water for injection q.s. 1 ml.

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., INC., West Point, Pa. 19486

in the treatment of depression

ELAVIL®
(AMITRIPTYLINE HCl | MSD)
helps open many doors



Agitated and hyperactive?...Or cooperative?

While psychotic symptoms remain acute, the barrier between you and the agitated, hyperactive patient may be insurmountable. Prompt intervention with HALDOL (haloperidol) often makes it possible for you to reach... relate...rehabilitate.

And rapport with such patients is further enhanced because HALDOL usually leaves patients alert and relatively non-sedated.

cooperation often begins with

HALDOL® (haloperidol)

For information relating to Indications, Contraindications, Warnings, Precautions and Adverse Reactions, please turn page.

Haldol®
(HALOPERIDOL)

a first choice for prompt rapport

A Dosage Form for Every Need:

4 tablet strengths for convenience in individualizing dosage: ½ mg., 1 mg., 2 mg. and 5 mg.

An undetectable, tasteless Liquid Concentrate for the patient unable or unwilling to swallow tablets: 2 mg. per cc.

A rapid-acting Injection for psychiatric emergencies: 5 mg. per cc., with 0.5 mg. methylparaben and 0.05 mg. propylparaben per cc., and lactic acid for pH adjustment to 3.4±0.2.

Summary of Directions for Use

Indications: For the treatment of such symptoms as moderate to severe agitation, anxiety and tension, assaultiveness, delusions, hallucinations, hostility, and hyperactivity when they are manifestations of psychosis including schizophrenia, the manic type of manic depressive illness, or psychotic reactions associated with organic brain syndromes or mental retardation. For the control of tics and vocal utterances of Gilles de la Tourette's Syndrome.

Contraindications: HALDOL (haloperidol) is contraindicated in patients who are severely depressed, comatose, have CNS depression due to alcohol or other centrally-acting depressants, have Parkinson's disease or are hypersensitive to this drug.

Warnings: ***Usage in Pregnancy***—Safe use of HALDOL (haloperidol) in pregnancy and lactation has not been established; therefore, its use in pregnancy, in nursing mothers, or in women of childbearing potential requires that the possible benefits of the drug be weighed against the potential hazards. A case of phocomelia in an infant whose mother received haloperidol along with a number of other medications during the first trimester of pregnancy has been reported (a causal relationship was not established in this case). Animals receiving 2 to 20 times the maximum human dose of HALDOL orally and/or parenterally showed increased incidence of resorption, reduced fertility, delayed delivery, dose-related pup mortality (presumably due to lack of maternal care reflecting CNS depression).

Usage in Children—Safety and effectiveness in children have not been established; therefore, this drug is not recommended for use in the pediatric age group.

General—Cases of bronchopneumonia, some fatal, have followed the use of major tranquilizers, including haloperidol. It has been postulated that lethargy and decreased sensation of thirst may lead to dehydration, hemoconcentration and reduced pulmonary ventilation. If these signs and symptoms appear, especially in the elderly, the physician should institute remedial therapy promptly. Although not reported with HALDOL (haloperidol), decreased serum cholesterol and/or cutaneous and ocular changes have been reported in patients receiving chemically-related drugs. HALDOL may impair the mental and/or physical abilities required for the performance of hazardous tasks such as operating machinery or driving a motor vehicle. The ambulatory patient should be warned accordingly. The use of alcohol should be avoided due to possible additive effects and hypotension.

Precautions: HALDOL (haloperidol) should be administered cautiously to patients: (1)—with severe cardiovascular disorders, because of the possibility of transient hypotension and/or precipitation of anginal pain. Should hypotension occur and a vasopressor be required, *epinephrine should not be used* since HALDOL may block its vasopressor activity and paradoxical further lowering of blood pressure may occur. (2)—receiving anticonvulsant medication, because HALDOL may lower the convulsive threshold, although it will *not* increase the effects of anticonvulsant medication. Adequate anticonvulsant therapy should be maintained concomitantly. (3)—with known allergies, or with a history of allergic reactions to drugs. (4)—receiving anticoagulants, since an isolated instance of interference occurred with the effects of one anticoagulant (phenindione).

If concomitant anti-Parkinson medication is required, it may have to be continued after haloperidol is discontinued because of the difference in excretion rates. If both are discontinued simultaneously, extrapyramidal symptoms may occur. Intraocular pressure may increase when anticholinergic drugs, including anti-Parkinson agents, are administered concomitantly with HALDOL. When HALDOL is used to control mania in cyclic disorders there may be a rapid mood swing to depression.

Adverse Reactions: ***CNS Effects:*** *Extrapyramidal Reactions*—Neuromuscular (extrapyramidal) reactions have been reported frequently, often during the first few days of treatment. Generally they involved Parkinson-like symptoms which usually were mild to moderately severe and reversible. Other types of neuromuscular reactions (motor restlessness, dystonia, akathisia, hyperreflexia, opisthotonos, oculogyric crises) have been reported far less frequently, but were often more severe. Severe extrapyramidal reactions have been reported at relatively low doses. Generally extrapyramidal symptoms are dose related since they occur at relatively high doses and disappear or become less severe when the dose is reduced. Administration of anti-Parkinson drugs may be required for control of such reactions. Persistent extrapyramidal reactions have been reported and the drug may have to be discontinued in such cases. *Other CNS Effects*—Insomnia, restlessness, anxiety, euphoria, agitation, drowsiness, depression, lethargy, headache, confusion, vertigo, grand mal seizures, and exacerbation of psychotic symptoms including hallucinations. ***Cardiovascular Effects:*** Tachycardia and hypotension. ***Hematologic Effects:*** Reports have appeared of mild and usually transient leukopenia and leukocytosis, minimal decreases in red blood cell counts, anemia, or a tendency toward lymphomonocytosis. Agranulocytosis has rarely been reported and then only in association with other medication. ***Liver Effects:*** Impaired liver function and/or jaundice have been reported, although a causal relationship has not been established. ***Dermatologic Reactions:*** Maculopapular and acneiform skin reactions and isolated cases of photosensitivity and loss of hair. ***Endocrine Disorders:*** Lactation, breast engorgement, mastalgia, menstrual irregularities, gynecomastia, impotence, increased libido, hyperglycemia and hypoglycemia. ***Gastrointestinal Effects:*** Anorexia, constipation, diarrhea, hypersalivation, dyspepsia, nausea and vomiting. ***Autonomic Reactions:*** Dry mouth, blurred vision, urinary retention and diaphoresis. ***Respiratory Effects:*** Laryngospasm, bronchospasm and increased depth of respiration.

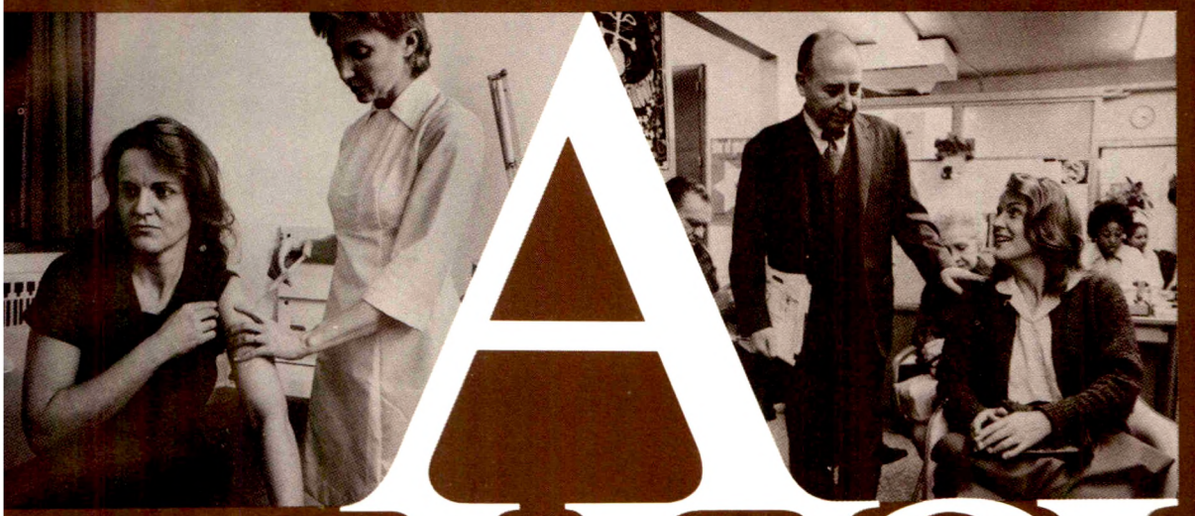
Complete dosage information available in insert which accompanies each package (or on request).

The use of the injectable form is intended for the acutely agitated psychotic patient with moderately severe to very severe symptoms.

IMPORTANT: Full directions for use should be read before HALDOL (haloperidol) is administered or prescribed. 11/72

McNEIL McNeil Laboratories, Inc.
Fort Washington, Pa. 19034

For schizophrenic patients...



A way out:



...that helps keep them out

Controlled Drug Delivery

with new

PROLIXIN® DECANOATE

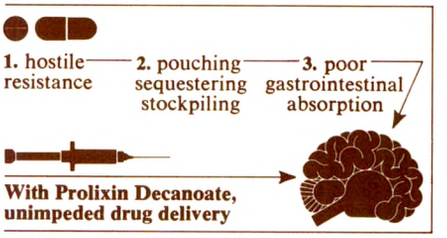
(FLUPHENAZINE DECANOATE INJECTION)

Puts control of the schizophrenic in your hands with injections 1 to 3 weeks apart or longer with an average duration of effect of about 2 weeks

Controlled drug delivery – a revolution in patient management

PROLIXIN® DECANOATE (Fluphenazine Decanoate Injection) HELPS ASSURE EFFECTIVE, UNHINDERED MEDICATION

Controlled drug delivery is *physician*-controlled delivery, an effective prophylactic maneuver against disruption of therapy–one of the most common causes of psychotic relapse. Is the patient taking his medication? You know because you administer it or direct others to. Once administered, therapy cannot be altered by the patient, by his family, or by anyone else.



In most patients, symptomatology is controlled by Prolixin Decanoate for periods of two weeks with a single injection. Sequestered medication and similar problems associated with oral therapy are not encountered. Nor does the patient risk drug loss through severe diarrhea or poor gastrointestinal absorption. Prolixin Decanoate keeps the patient medicated...helps make him more amenable to the entire treatment program and improves his chances for rehabilitation and discharge.

The outpatient is vulnerable to the dictates of his own poor judgment. Deluded by a sense of well-being, he may question the need for medication. Family and friends often give him misleading advice. Oral therapy in such a patient encourages missed doses. Medication with Prolixin Decanoate (Fluphenazine Decanoate Injection) helps assure drug delivery when required and in the dosage prescribed. It helps keep the outpatient out.



FOUR REASONS FOR READMISSION...

For brief summary, see last page of this presentation.

ROLIXIN® DECANOATE
luphenazine Decanoate Injection)
SURES ECONOMIC DRUG
ELIVERY...LESS FREQUENT
OSING THAN WITH ORAL
IERAPY

Controlled drug delivery brings cost therapy down with less hospitalization, less nursing time, less frequent sing. Low annual dosage means less st for the hospital, for the patient's nily, and for the community. It ans a minimum of drug holidays to oid long-term complications, with ir confusing schedules for patient d family.

ntrolled drug delivery—
evolution in the treatment of the hizophrenic patient

ROLIXIN® DECANOATE
luphenazine Decanoate Injection)
ELPS ENHANCE LIKELIHOOD
F DISCHARGE

Optimally, the mental hospital ould be a rehabilitating bridge beeen life before and life after custoal care. Prolixin Decanoate often ortens that bridge because getting the patient out is frequently a matter of eping him medicated. And 1 injecon of Prolixin Decanoate means apoximately 2 weeks of symptom ntrol. The importance of control by e physician with this injectable can seen in the fact that about 1 out of ery 5 inpatients does not take his tabs even when they are administered by nursing staff. With controlled drug delivery, lost or hidden doses are not a problem.

In one study,[1] 24 chronic long-term hospital patients were treated with Prolixin Decanoate in dosages of 12.5 mg. to 75 mg. given every 7 days to 3 weeks. Most of the patients received 25 to 50 mg. per injection. Of these, 13 were discharged after 6 months of treatment, 4 were considered dischargeable, and 7 did not improve. In 12 of the 24 patients who previously had been on different psychotropic drugs for periods of 4 to 96 weeks, improvement with Prolixin Decanoate (Fluphenazine Decanoate Injection) was observed in affect, volition, and higher mental functions. Dischargeability in these patients "may also have been enhanced because the staff, the patient, and the family were assured of an adequate and regular medication intake."[1]

Controlled drug delivery—
a revolution in the care of the outpatient

PROLIXIN® DECANOATE
(Fluphenazine Decanoate Injection)
PROMOTES CONTINUITY OF MEDICATION WITH DIMINISHED LIKELIHOOD OF RELAPSE COMPARED WITH ORAL THERAPY

Success in rehabilitative areas like employment and social acceptance depends in large measure on adequate and continuing phenothiazine intake; success in family adjustment no less so. Short-acting medication is not the best path to such success. According to one report,[2] "approximately 50% of all discharged psychotic patients fail to take even the first dose of their outpatient medication." And McClellan and Cowan[3] state that a substantial number of patients taking antipsychotic drugs do so in amounts significantly less than those prescribed. Even once-daily administration does not solve the problem of poor home supervision or the patient's lack of insight into his condition.

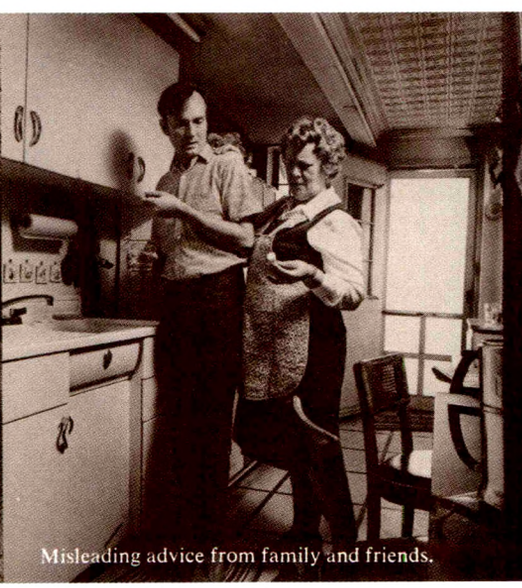
Controlled drug delivery with Prolixin Decanoate (Fluphenazine Decanoate Injection) is an efficient route to continuity of medication, and therefore to long-term remission. For one thing there is less strain on the patient's often tenuous adjustment to family living. Since family members are not responsible for supervising the patient's medical needs, they tend to be more accepting, and better feeling is promoted merely because the controlled delivery regimen demonstrates that improvement is possible. Controlled drug delivery also strengthens the patient's psychological defenses. He is not reminded of his psychiatric illness by multiple daily doses.

The same unique advantages of controlled drug delivery with Prolixin Decanoate that promote the discharge-

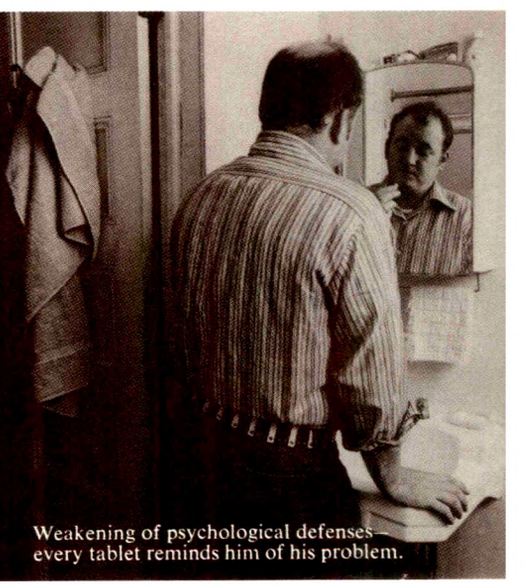
(Continued on following page)



ockpiling.



Misleading advice from family and friends.



Weakening of psychological defenses—every tablet reminds him of his problem.

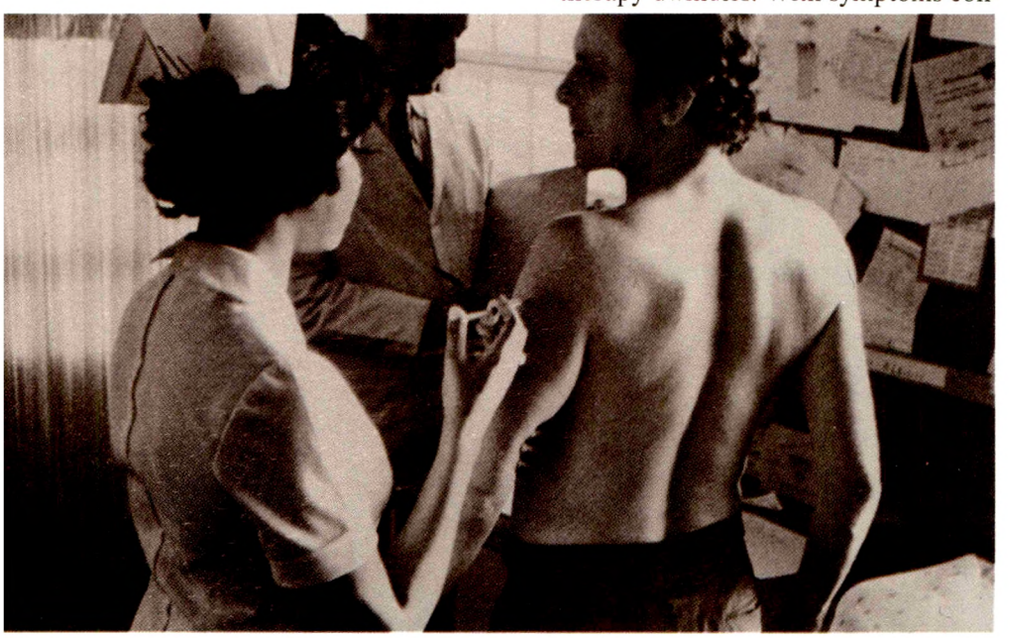
OOD REASONS FOR CONTROLLED DRUG DELIVERY

(Continued from preceding page)
ability of the inpatient and help maintain him in the community are true for the patient who has never been hospitalized. It is just these advantages that will help the physician or psychiatrist keep him in the community without the need for custodial care.

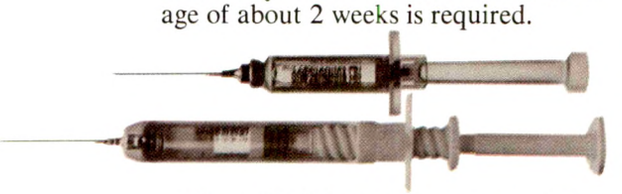
Controlled drug delivery — a revolution in efficiency of administration

PROLIXIN® DECANOATE (Fluphenazine Decanoate Injection) SAVES TIME, REDUCES COST IN THE HOSPITAL, CLINIC, OFFICE

Controlled drug delivery saves time, reduces costs in the hospital. With Prolixin Decanoate there can be no palming, pouching, regurgitating. With Prolixin Decanoate resistance to therapy dwindles. With symptoms con-



trolled, the patient is more manageable, more comfortable, more amenable to the total hospital treatment program. With Prolixin Decanoate only 1 dose visit every 1 to 3 weeks with an average of about 2 weeks is required.



Controlled drug delivery saves time, reduces costs in the clinic and office.

With Prolixin Decanoate less frequ
dosing. With Prolixin Decanoate (F
phenazine Decanoate Injection) m
patients report for their injections o
once in every 2-week period.

18 PATIENTS	18 PATIENTS
	
8 a.m. ¾ hr. 2 p.m. ¾ hr. 6 p.m. ¾ hr.	1 injection every 14 days fc most patients
=2¼ hrs. nursing time	4 minutes required for eac injection (approx
2¼ hrs. × 14 days **=31½ hrs. of nursing time every 14 days**	**=1 hr. 10 minute nursing time in 14 days**
NURSING TIME SAVED IN 14 DAYS 30 hours, 20 minutes[4]	

Controlled drug delivery — a revolution in convenience of administration

PROLIXIN® DECANOATE (Fluphenazine Decanoate Injection MAY BE DELIVERED IN EASY-TO-USE UNIMATIC® SYRINGES

Prolixin Decanoate may be giv
intramuscularly or subcutaneou
Local tissue reactions occur only rar

A dry syringe and needle of at le
21 gauge should be used. Use of a v
needle or syringe may cause the s
tion to become cloudy. Prolixin De
noate is available in vials of 5 cc. a
in Unimatic single-dose preassemb
syringes and in Unimatic cartric
needle units with a reusable-plas
holder.

N.B. Extrapyramidal reactions
cur frequently. Most often they are
versible and can usually be control
by administration of antiparkinson
drugs. However, in some instan
they are persistent (see Adverse
actions section of Brief Summar
Patients should be forewarned a
reassured.

Reference: 1. Keskiner, A. et al.: Arch. (
Psychiatry 18:477, Apr. 1968. 2. Goldb
H. L., DiMascio, A. and Chaudhary, B.:
chosomatics 11:173, May-June 1970. 3.
Clellan, T. A. and Cowan, G.: BRI
COMMUNICATIONS. Am. J. Psychi
126:1771, June 1970. 4. Platt, R.: Br. J.
Psychiatry 2:187, 1968.

For Brief Summary, see opposite pa

Controlled Drug Delivery

in schizophrenia with new

PROLIXIN® DECANOATE

(FLUPHENAZINE DECANOATE INJECTION)

BRIEF SUMMARY
Prolixin Decanoate (Fluphenazine Decanoate Injection) provides 25 mg. fluphenazine decanoate per cc. in a sesame oil vehicle with 1.2% (w/v) benzyl alcohol as a preservative.

CONTRAINDICATIONS: In presence of suspected or established subcortical brain damage. In patients who have a blood dyscrasia, liver damage or renal insufficiency, or who are receiving large doses of hypnotics, or who are comatose or severely depressed. In patients who have shown hypersensitivity to fluphenazine; cross-sensitivity to phenothiazine derivatives may occur.

Not intended for use in children under 12.

WARNINGS: Mental and physical abilities required for driving a car or operating heavy machinery may be impaired by use of this drug. Physicians should be alert to the possibility that severe adverse reactions may occur which require immediate medical attention. Potentiation of effects of alcohol may occur. Safety for use during pregnancy has not been established; weigh possible hazards against potential benefits if administered during pregnancy.

PRECAUTIONS: Caution must be exercised if another phenothiazine compound caused cholestatic jaundice, dermatoses or other allergic reactions because of the possibility of cross-sensitivity. When psychotic patients on large doses of a phenothiazine drug are to undergo surgery, hypotensive phenomena should be watched for; less anesthetics or central nervous system depressants may be required. Because of added anti-cholinergic effects, fluphenazine may potentiate the effects of atropine.

Use fluphenazine decanoate cautiously in patients exposed to extreme heat or phosphorus insecticides; in patients with ulcer disease history since aggravation of peptic ulcer has occurred; in patients with history of convulsive disorders since grand mal convulsions have occurred; and in patients with special medical disorders such as mitral insufficiency or other cardiovascular diseases, and pheochromocytoma. Bear in mind that with prolonged therapy there is the possibility of liver damage, pigmentary retinopathy, lenticular and corneal deposits, and development of irreversible dyskinesia.

Fluphenazine decanoate should be administered under the direction of a physician experienced in the clinical use of psychotropic drugs. Periodic checking of hepatic and renal functions and blood picture should be done. Renal function of patients on long-term therapy should be monitored; if BUN becomes abnormal, treatment should be discontinued. "Silent pneumonias" are possible.

ADVERSE REACTIONS: *Central Nervous System*—Extrapyramidal symptoms are most frequently reported. These include pseudoparkinsonism, dystonia, dyskinesia, akathisia, oculogyric crises, opisthotonos, and hyperreflexia; most often these are reversible, but they may be persistent. One can expect a higher incidence of such reactions with fluphenazine decanoate than with less potent piperazine derivatives or straight-chain phenothiazines. The incidence and severity will depend more on individual patient sensitivity, but dosage level and patient age are also determinants. As these reactions may be alarming, the patient should be forewarned and reassured. These reactions can usually be controlled by administration of anti-parkinsonian drugs such as benztropine mesylate or intravenous Caffeine and Sodium Benzoate Injection U.S.P., and by subsequent reduction in dosage. A persistent and sometimes irreversible pseudo-parkinsonian syndrome may develop with chronic administration of phenothiazine compounds. Rhythmic, stereotyped dyskinetic involuntary movements, particularly of the face, mouth, tongue and jaw occur, and may be accompanied by choreiform movements of the limbs. The symptoms persist after drug withdrawal. Anti-parkinsonian agents are seldom of benefit. The risk appears to be greatest in elderly females with organic brain damage receiving large and prolonged doses. Phenothiazine derivatives have been known to cause restlessness, excitement, or bizarre dreams and reactivation or aggravation of psychotic processes may be encountered. If drowsiness or lethargy occur, the dosage may have to be reduced. Dosages, far in excess of the recommended amounts, may induce a catatonic-like state.

Autonomic Nervous System—Hypertension and fluctuations in blood pressure have been reported. Although hypotension is rarely a problem, patients with pheochromocytoma, cerebral vascular or renal insufficiency or severe cardiac reserve deficiency such as mitral insufficiency appear to be particularly prone to this reaction and should be observed carefully. Supportive measures including intravenous vasopressor drugs should be instituted immediately should severe hypotension occur; Levarterenol Bitartrate Injection U.S.P. is the most suitable drug; *epinephrine should not be used* since phenothiazine derivatives have been found to reverse its action. Nausea, loss of appetite, salivation, polyuria, perspiration, dry mouth, headache and constipation may occur. Reducing or temporarily discontinuing the dosage will usually control these effects. Blurred vision, glaucoma, bladder paralysis, fecal impaction, paralytic ileus, tachycardia or nasal congestion have occurred in some patients on phenothiazine derivatives.

Metabolic and Endocrine—Weight change, peripheral edema, abnormal lactation, gynecomastia, menstrual irregularities, false results on pregnancy tests, impotency in men and increased libido in women have occurred in some patients on phenothiazine therapy.

Allergic Reactions—Itching, erythema, urticaria, seborrhea, photosensitivity, eczema and exfoliative dermatitis have been reported with phenothiazines. The possibility of anaphylactoid reactions should be borne in mind.

Hematologic—Blood dyscrasias including leukopenia, agranulocytosis, thrombocytopenic or nonthrombocytopenic purpura, eosinophilia, and pancytopenia have been observed with phenothiazines. If soreness of the mouth, gums or throat or any symptoms of upper respiratory infection occur and confirmatory leukocyte count indicates cellular depression, therapy should be discontinued and other appropriate measures instituted immediately.

Hepatic—Liver damage manifested by cholestatic jaundice, particularly during the first months of therapy, may occur; treatment should be discontinued. A cephalin flocculation increase, sometimes accompanied by alterations in other liver function tests, has been reported in patients who have had no clinical evidence of liver damage.

Others—Sudden deaths have been reported in hospitalized patients on phenothiazines. Previous brain damage or seizures may be predisposing factors. High doses should be avoided in known seizure patients. Shortly before death, several patients showed flare-ups of psychotic behavior patterns. Autopsy findings have usually revealed acute fulminating pneumonia or pneumonitis, aspiration of gastric contents, or intramyocardial lesions. Although not a general feature of fluphenazine, potentiation of central nervous system depressants such as opiates, analgesics, antihistamines, barbiturates, and alcohol may occur.

Hypotension severe enough to cause fatal cardiac arrest, altered electrocardiographic and electroencephalographic tracings, altered cerebrospinal fluid proteins, cerebral edema, asthma, laryngeal edema, and angioneurotic edema; with long-term use, skin pigmentation and lenticular and corneal opacities have occurred with phenothiazines. Local tissue reactions occur only rarely with injections of fluphenazine decanoate.

For full prescribing information, consult package insert.

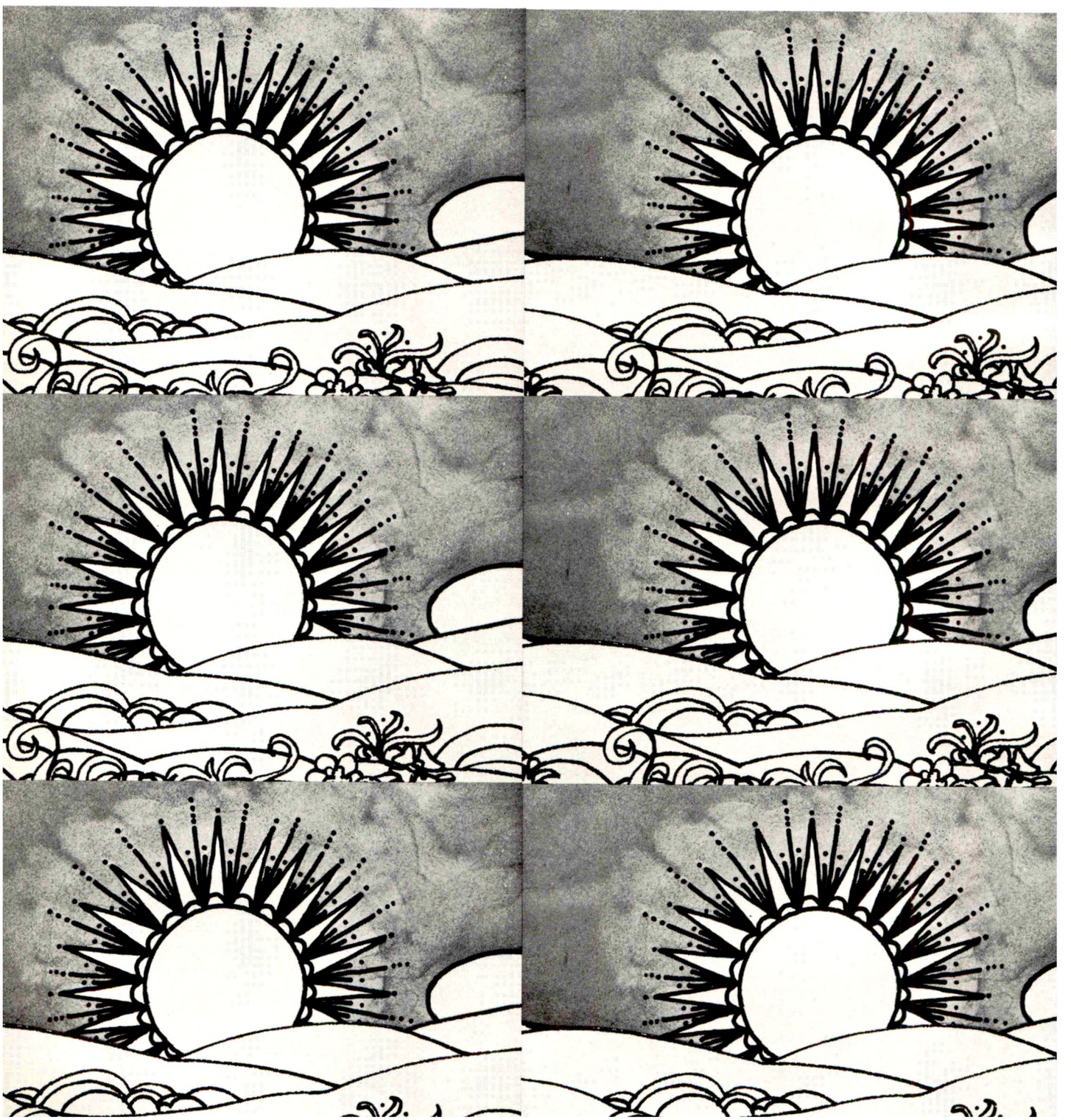
Supply: 1 cc. Unimatic® single dose preassembled syringes and cartridge-needle units, and 5 cc. vials.



SQUIBB HOSPITAL DIVISION

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Princeton, N.J. 08540

The new-day constant for drug-induced parkinsonism:



ARTANE®
TRIHEXYPHENIDYL HCl

Non-cumulative action makes each day of therapy a new day



That's why ARTANE is ideally suited for the patient on long-term phenothiazine therapy. In economical tablets or SEQUELS Sustained Release Capsules*, it offers you *more* than the rapid reversal of extrapyramidal symptoms.

Usually there is no drug buildup to cause undue toxicity in prolonged therapy. Minimal atropine-like side effects. Accurate dosage titration in adjunctive use. And, to minimize missed doses and anxiety in outpatient therapy— one-dose *all-day* control or prevention with SEQUELS.*

For hospitalized or ambulatory patients, ARTANE has the "constant" they need. Effective *non-cumulative* action.

Tablets—2 mg, 5 mg; Elixir†—2 mg/5 cc or SEQUELS® Sustained Release Capsules—5 mg.

Tablets and Elixir Indications: FDA has evaluated this drug as Effective as an adjunct in the therapy of the indications listed below under SEQUELS.

***INDICATIONS FOR ARTANE SEQUELS:**
Based on a review of this drug in sustained release form by the National Academy of Sciences-National Research Council and/or other information, FDA has classified the indications as follows: Probably effective as an adjunct in the therapy of all forms of parkinsonism (postencephalitic, arteriosclerotic, and idiopathic) and for use in the prevention or control of extrapyramidal disorders due to central nervous system drugs such as reserpine and phenothiazines.

WARNING:
Patients to be treated should have a gonioscope evaluation and close monitoring of intraocular pressures at regular periodic intervals.

Precautions: Patients with cardiac, liver or kidney disorders or with hypertension should be maintained under close observation. In long-term therapy, take care to avoid allergic and other untoward reactions. Use with caution in patients with glaucoma, obstructive disease of the gastrointestinal or genitourinary tracts and in elderly males with possible prostatic hypertrophy. Geriatric patients require strict dosage regulation. Incipient glaucoma may be precipitated.

Adverse Reactions: Such effects as dryness of mouth, blurring of vision, dizziness, nausea or nervousness will be experienced by 30 to 50 per cent of patients. (These tend to lessen and can often be controlled by adjusting dosage.) Isolated instances of suppurative parotitis, skin rashes, dilation of the colon, paralytic ileus, delusions, hallucinations and paranoia (1 doubtful case) have been reported. Patients with arteriosclerosis or with a history of idiosyncrasy to drugs may exhibit mental confusion, agitation, disturbed behavior, or nausea and vomiting. If a severe reaction occurs, discontinue drug for a few days, then resume at lower dosage. Psychiatric disturbances can result from overdosage to sustain euphoria. Side effects of any atropine-like drugs include constipation, drowsiness, urinary hesitancy or retention, tachycardia, dilation of the pupil, increased intraocular tension, weakness, vomiting and headache.

†Lime-mint flavored, with 0.08% methylparaben, 0.02% propylparaben, and 5% alcohol as preservatives.

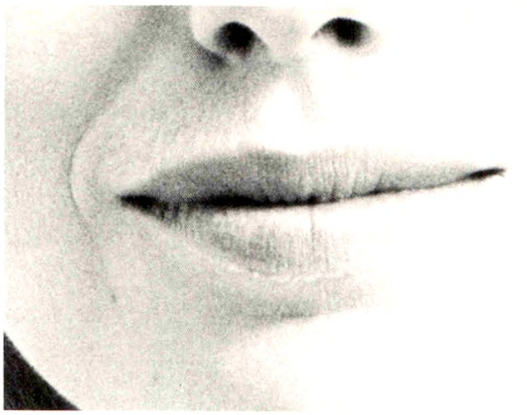
*This drug in sustained release form has been evaluated as probably effective. See Brief Summary.

Lederle LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York 10965

716-3

A25

Today, she managed a smile



(Not long ago, she couldn't stop sobbing)

Before he sees that first positive response—however hesitant and tentative—the physician may have to bring into play many different aspects of therapy. Establishing a therapeutic relationship may be the first difficulty as well as the first necessity. Psychotherapy, family and community support, occupational and social counseling, and drug therapy may all have to be enlisted.

The characteristically rapid energizing action of VIVACTIL may help establish early therapeutic rapport by lessening the patient's lethargy—often during the first week of medication. VIVACTIL helps elevate mood, usually within the third or fourth week of treatment.

Characteristically, the drug has no sedating or tranquilizing properties. (Symptoms such as anxiety or agitation may be aggravated.)

Dosage of VIVACTIL must be individualized, and patients should be under close medical supervision. For many adult patients with clinically significant depression, 10 mg t.i.d. may provide control of symptoms. Others may require as little as 15 mg or as much as 60 mg a day. In elderly patients and adolescents, lower dosages are recommended.

In depression,

TABLETS, 5 mg and 10 mg

Vivactil®

(Protriptyline HCl | MSD) helps establish early therapeutic rapport

Contraindications: Known hypersensitivity; acute recovery phase following myocardial infarction. Not recommended for use in children. Should not be given concomitantly with an MAOI; hyperpyretic crises, severe convulsions, and deaths have occurred in patients receiving tricyclic antidepressant and MAOI drugs simultaneously. When it is desired to substitute protriptyline HCl for an MAOI, a minimum of 14 days should be allowed to elapse after the latter is discontinued. Protriptyline HCl should then be initiated cautiously with gradual increase in dosage until optimum response is achieved.

Warnings: May block the antihypertensive effect of guanethidine or similarly acting compounds. May impair mental and/or physical abilities required for the performance of hazardous tasks, such as operating machinery or driving a motor vehicle. Should be used with caution in patients with a history of seizures and, because of its autonomic activity, in patients with a tendency to urinary retention or increased intraocular tension.

Tachycardia and postural hypotension may occur more frequently than with other antidepressant drugs. Should be used with caution in elderly patients and patients with cardiovascular disorders; such patients should be observed closely because of the tendency of the drug to produce tachycardia, hypotension, arrhythmias, and prolongation of the conduction time. Myocardial infarction and stroke have occurred with drugs of this class. On rare occasions, hyperthyroid patients or those receiving thyroid medication may develop arrhythmias when this drug is given.

Usage in Children: Not recommended for use in children because safety and effectiveness in the pediatric age group have not been established.

Usage in Pregnancy: Safe use in pregnancy and lactation has not been established; therefore, use in pregnant women, nursing mothers, or women who may become pregnant requires that possible benefits be weighed against possible hazards to mother and child.

Precautions: When protriptyline HCl is used to treat the depressive component of schizophrenia, psychotic symptoms may be aggravated; likewise, in manic-depressive psychosis, depressed patients may experience a shift toward the manic phase; paranoid delusions, with or without associated hostility, may be exaggerated. In any of these circumstances, it may be advisable to reduce the dose of protriptyline HCl or to use a major tranquilizing drug, such as perphenazine, concurrently. Symptoms, such as anxiety or agitation, may be aggravated in overactive or agitated patients.

When given with anticholinergic agents or sympathomimetic drugs, close supervision and careful adjustment of dosages are required. In healthy test subjects, maximum therapeutic doses significantly potentiated the peripheral circulatory effects of intravenous norepinephrine and epinephrine (manifested by undue increase in systolic and diastolic blood pressure and decrease in pulse rate). May enhance the response to alcohol and the effects of barbiturates and other CNS depressants. The possibility of suicide in depressed patients remains during treatment and until significant remission occurs; this type of patient should not have easy access to large quantities of the drug. Concurrent administration with electroshock therapy may increase the hazards of therapy; such treatment should be limited to patients for whom it is essential. Discontinue the drug several days before elective surgery, if possible.

Adverse Reactions: *Note:* Included in this listing are a few adverse reactions which have not been reported with this specific drug. However, the pharmacologic similarities among the tricyclic antidepressant drugs require that each of the reactions be considered when protriptyline HCl is administered. Protriptyline HCl is more likely to aggravate agitation and anxiety and produce cardiovascular reactions such as tachycardia and hypotension.

Cardiovascular: hypotension, hypertension, tachycardia, palpitation, arrhythmias.

CNS and Neuromuscular: confusional states (especially in the elderly); disorientation; delusions; hallucinations; anxiety; agitation; restlessness; insomnia; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremor; seizures.

Anticholinergic: dry mouth and, rarely, associated sublingual adenitis; blurred vision; disturbance of accommodation; mydriasis; constipation; urinary retention; dilatation of the urinary tract.

Other: skin rash, petechiae, urticaria, itching, photosensitization (avoid excessive exposure to sunlight), edema (general, or of face and tongue), nausea, vomiting, epigastric distress, anorexia, peculiar taste, stomatitis, parotid swelling, impotence, jaundice (simulating obstructive), drowsiness, dizziness, weakness, fatigue, headache, perspiration, weight gain or loss, urinary frequency.

Withdrawal Symptoms: In an occasional patient, abrupt cessation of treatment after prolonged administration may produce nausea, headache, and malaise. These are not indicative of addiction.

The following adverse reactions have been reported less frequently with the class of antidepressant agent to which protriptyline HCl belongs: myocardial infarction, heart block, stroke, panic, nightmares, alteration in EEG patterns, hypomania, exacerbation of psychosis, extrapyramidal symptoms, tinnitus, paralytic ileus, delayed micturition, drug fever, bone-marrow depression, agranulocytosis, eosinophilia, purpura, thrombocytopenia, diarrhea, abdominal cramps, black tongue, testicular swelling and gynecomastia in the male, breast enlargement and galactorrhea in the female, increased or decreased libido, altered liver function, flushing, nocturia, alopecia.

Supplied: Tablets, containing 5 mg and 10 mg protriptyline HCl each, in single-unit packages of 100 and bottles of 100 and 1000.

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

addendum

MSD
MERCK
SHARP
DOHME



5 mg (orange)



10 mg (yellow)

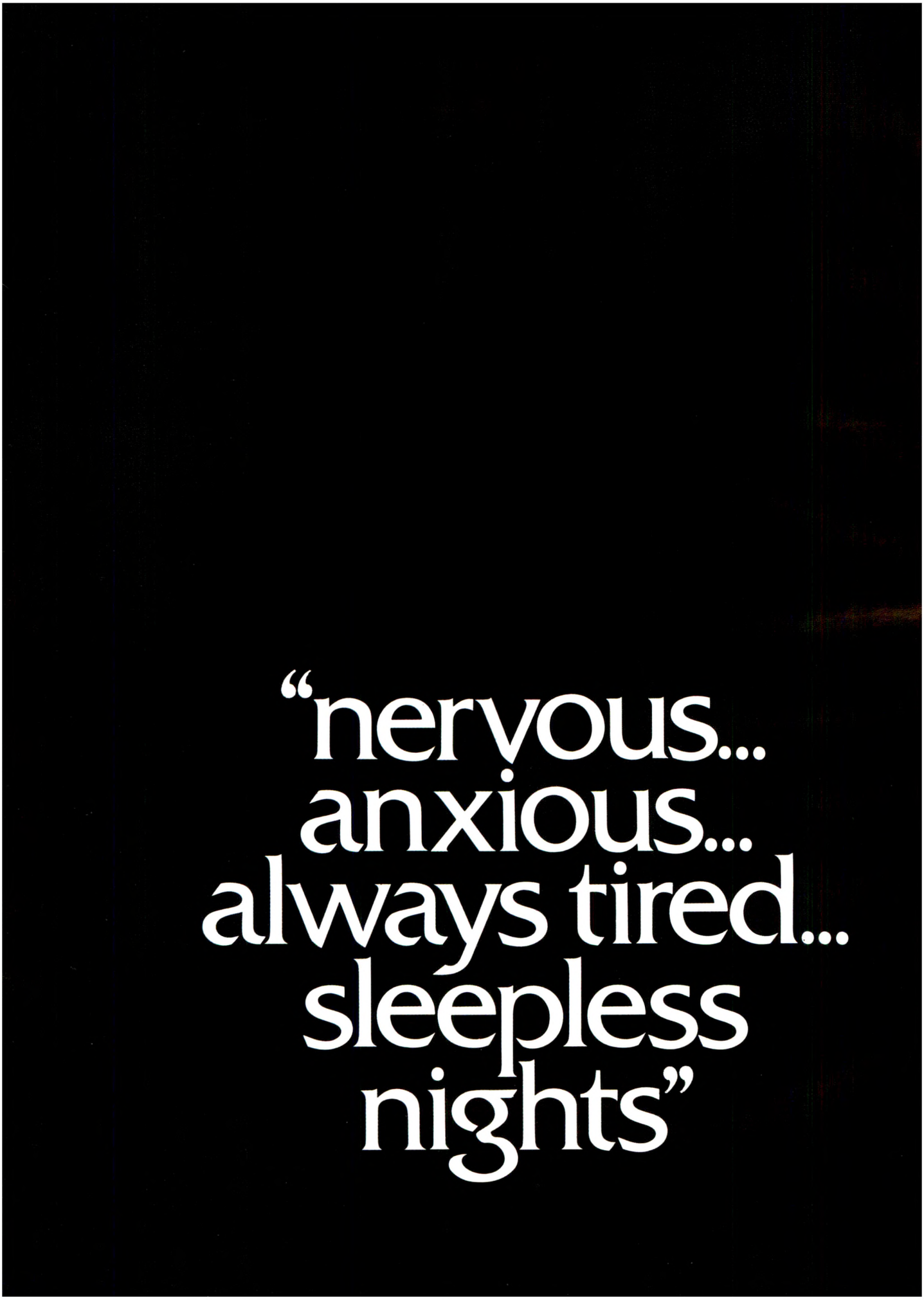
The usual regimen for adults is 15 to 40 mg a day divided into three or four doses. Dosage may be increased to 60 mg a day if necessary.

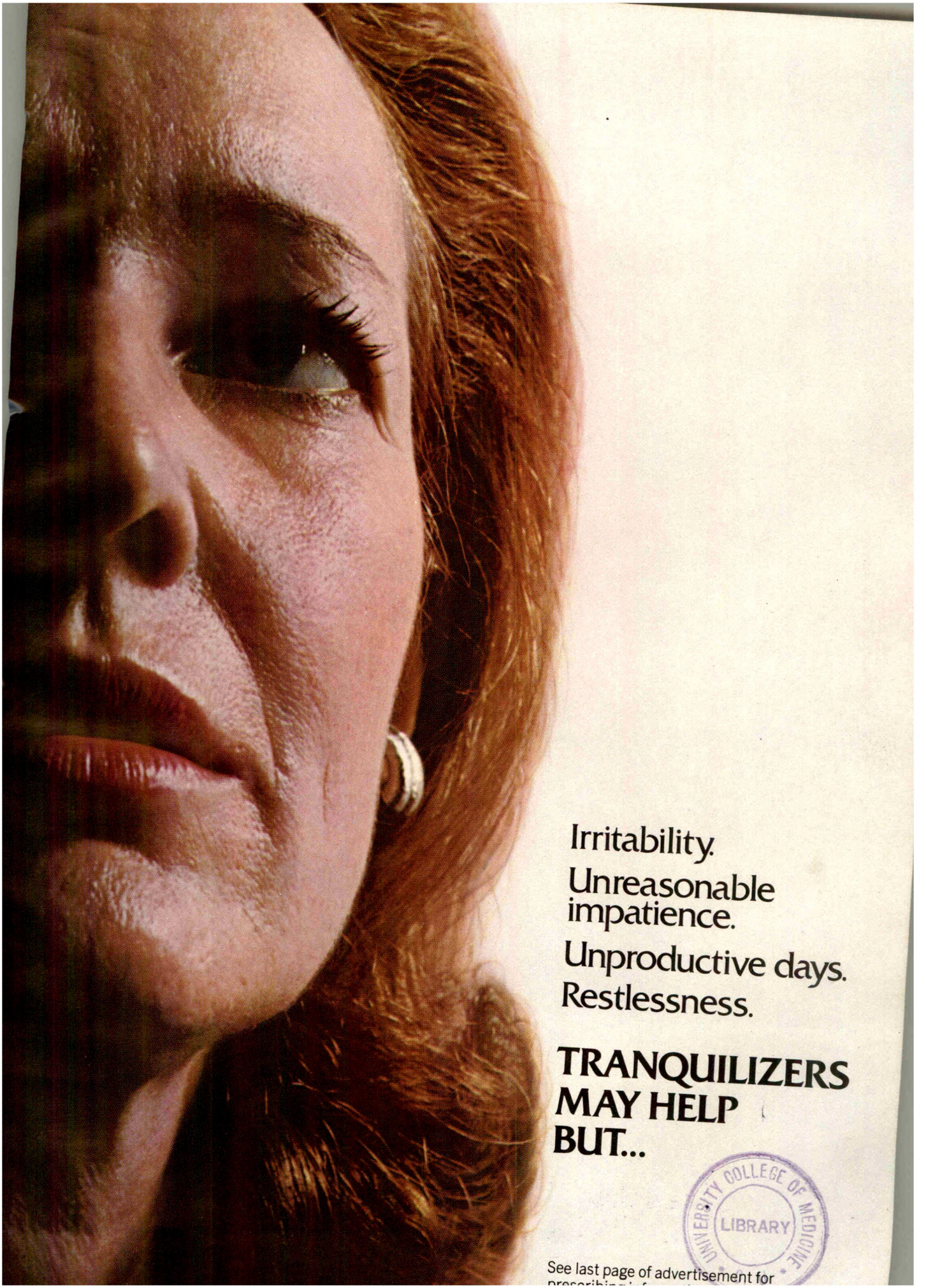
In elderly and adolescent patients, lower dosages are recommended; initially, a regimen of 5 mg t.i.d. is suggested with adjustment as necessary to the required amount. In elderly patients, the cardiovascular system must be monitored closely when the daily dose exceeds 20 mg.

Because VIVACTIL (Protriptyline HCl, MSD) characteristically is a nonsedating tricyclic antidepressant, activating and energizing in effect, the last dose of the day should be given no later than mid-afternoon to avoid insomnia. Required increases should be added to the morning dose.

When necessary to increase dosage, it should be done gradually. After satisfactory improvement has been achieved, dosage should be reduced to the smallest amount that will maintain relief of symptoms. Maintenance therapy should be continued for at least three months after satisfactory improvement occurs.

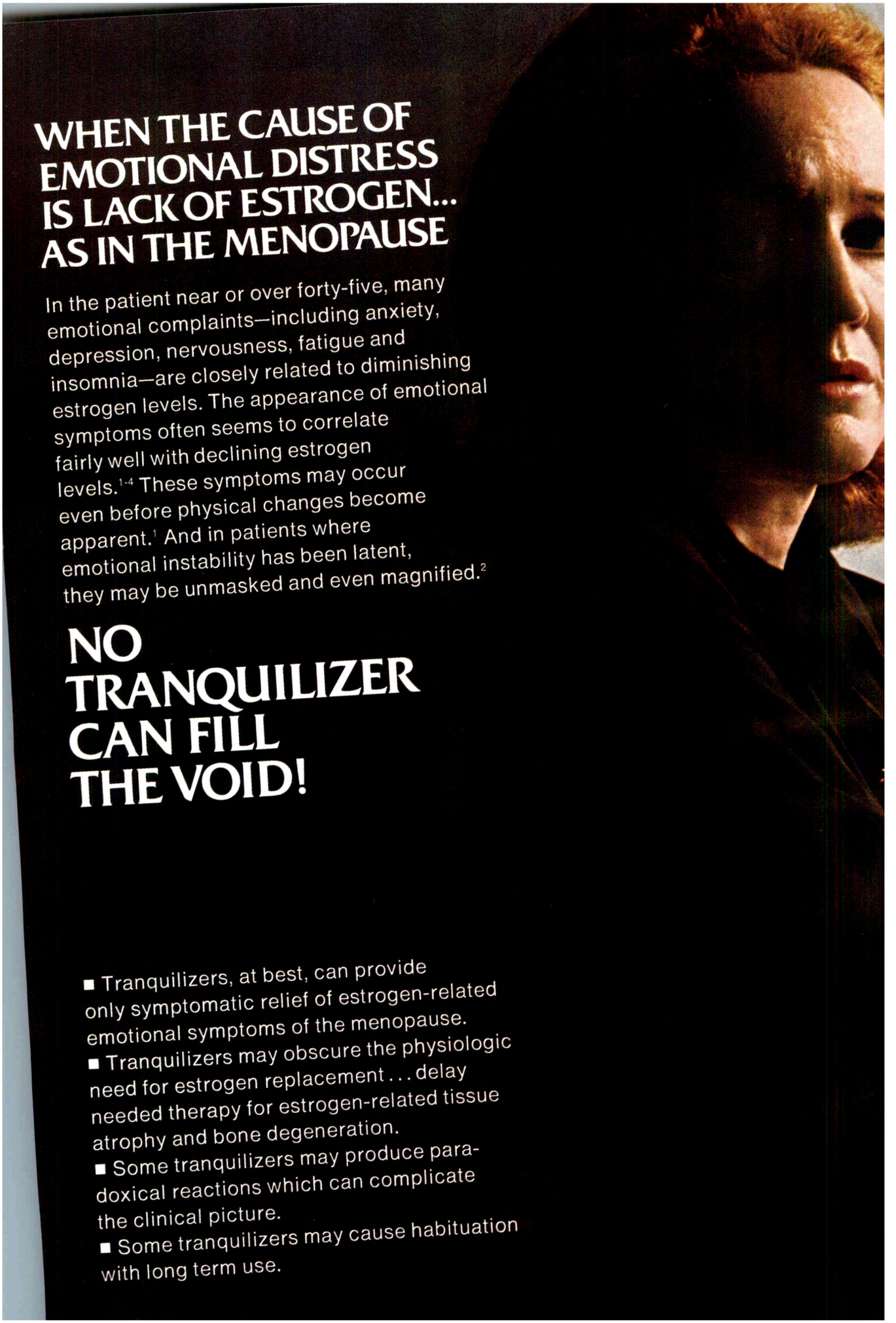
(*Usage in Children:* In view of the lack of experience in children, this drug is not recommended for patients under 12 years of age.)


"nervous...
anxious...
always tired...
sleepless
nights"



UNIVERSITY COLLEGE OF MEDICINE
LIBRARY

See last page of advertisement for



WHEN THE CAUSE OF EMOTIONAL DISTRESS IS LACK OF ESTROGEN... AS IN THE MENOPAUSE

In the patient near or over forty-five, many emotional complaints—including anxiety, depression, nervousness, fatigue and insomnia—are closely related to diminishing estrogen levels. The appearance of emotional symptoms often seems to correlate fairly well with declining estrogen levels.[1-4] These symptoms may occur even before physical changes become apparent.[1] And in patients where emotional instability has been latent, they may be unmasked and even magnified.[2]

NO TRANQUILIZER CAN FILL THE VOID!

- Tranquilizers, at best, can provide only symptomatic relief of estrogen-related emotional symptoms of the menopause.
- Tranquilizers may obscure the physiologic need for estrogen replacement . . . delay needed therapy for estrogen-related tissue atrophy and bone degeneration.
- Some tranquilizers may produce paradoxical reactions which can complicate the clinical picture.
- Some tranquilizers may cause habituation with long term use.

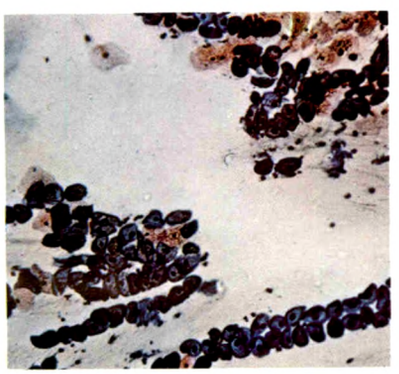
By providing sound specific natural estrogen replacement, PREMARIN does what tranquilizers, sedatives, and antidepressants can't possibly do —relieves estrogen-related emotional symptoms of the menopause by treating the underlying deficiency.

At the same time, PREMARIN helps control physiologic symptoms of estrogen depletion, such as hot flushes, sweats, genital tissue atrophy, and, in selected cases, helps retard postmenopausal osteoporotic bone degeneration.†

Estrogen-related anxiety and depression usually respond to estrogen replacement therapy in a relatively short time.[3,5] Other "psychogenic" symptoms such as headaches, crying spells, insomnia, feelings of weakness and fatigue may also be relieved.[1,3,4,6] And in a large majority of patients, PREMARIN imparts a renewed sense of well-being.[7] PREMARIN. It gives patients back something they've lost. No tranquilizer can do that.

Whether your patient is a woman of forty-five suffering from estrogen-related emotional distress . . . or a grandmother of fifty-five with atrophic vaginitis . . . or a septuagenarian with osteoporosis and chronic back pain, she may often benefit from continued replacement therapy with PREMARIN.

PREMARIN is a natural estrogen. It contains natural estrogens exclusively—no synthetics. And PREMARIN provides the complete estrogen complex. Of all leading oral estrogens, it is the only one whose composition meets every specification for conjugated estrogens listed in the latest United States Pharmacopeia (Edition XVIII). PREMARIN. Thirty years of proven efficacy and patient acceptance. Virtually free from side effects. It's the most widely prescribed agent of its kind.



Patient, age 47, before therapy.* Vaginal cytogram shows virtual absence of superficial cells, indicating estrogen depletion: Superficial cells—5%/Intermediate cells—25%/Parabasal cells—70%.



Patient after PREMARIN therapy.* Vaginal cytogram shows reappearance of superficial cells, indicating improved estrogen status: Superficial cells—85%/Intermediate cells—15%/Parabasal cells—0%.

*Case report on file, Medical Department, Ayerst Laboratories, New York, N.Y.

BRAND OF

PREMARIN®
CONJUGATED ESTROGENS TABLETS, U.S.P.

RELIEVES HER SYMPTOMS AND CONTROLS THEIR CAUSE

†This drug has been evaluated as "probably" effective for postmenopausal osteoporosis.

Ayerst®

See last page of advertisement for Prescribing Information.

(Complete text of package circular.)

PREMARIN® (Conjugated Estrogens Tablets, U.S.P.)

Description: PREMARIN (Conjugated Estrogens, U.S.P.) is a mixture of estrogens, obtained exclusively from natural sources, occurring as the sodium salts of water-soluble estrogen sulfates blended to represent the average composition of material derived from pregnant mares' urine. It contains estrone, equilin, and 17*a*-dihydroequilin, together with smaller amounts of 17*a*-estradiol, equilenin, and 17*a*-dihydroequilenin as salts of their sulfate esters.

Actions: Estrogens are responsible for development and maintenance of the female reproductive system and secondary sex characteristics. They cause the growth and development of the vagina, uterus, and fallopian tubes, and enlargement of the breasts. Indirectly, they contribute to the shaping of the skeleton, maintenance of tone and elasticity of urogenital structures, changes in the epiphyses of the long bones that allow for pubertal growth spurt and termination, growth of axillary and pubic hair, and pigmentation of the nipples and genitals. Estrogens are also involved in psychologic and emotional aspects of feminine behavior. As estrogen levels increase during the menstrual cycle, there is a sense of vigor and well-being, and in the menopausal period estrogens aid in relieving nervous symptoms (e.g. anxiety, depression and irritability) due to estrogen deficiency. Decline of estrogenic activity at the end of the menstrual cycle can bring on menstruation, although the cessation of progesterone secretion is the most important factor in the mature ovulatory cycle. However, in the pre- or non-ovulatory cycle, estrogen is the primary determinant in the onset of menstruation. Estrogens do not induce ovulation.

Estrogens affect calcium and phosphorus metabolism, and are involved in maintenance of normal bone structure. In prolonged estrogen deficiency states, administration of estrogen acts to prevent associated bone degenerative changes.

Estrogens appear to be responsible for the relatively greater amount of alpha-lipoprotein and correspondingly lower amount of beta-lipoprotein found in premenopausal women as compared with men.

Estrogens affect the release of pituitary gonadotropins and may also deplete the gonadotropic content of the pituitary.

Indications: Based on a review of PREMARIN Tablets by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications for use as follows:

Effective: As replacement therapy for naturally occurring or surgically induced estrogen deficiency states associated with: the climacteric, including the menopausal syndrome and postmenopause; senile vaginitis and kraurosis vulvae, with or without pruritus; female hypogonadism; amenorrhea; and primary ovarian failure.

For abnormal uterine bleeding due to hormonal imbalance in the absence of organic pathology such as submucosal fibroids or uterine cancer.

For prevention of postpartum breast engorgement; also for inoperable progressing prostatic cancer (for palliation only when castration is not feasible or when castration failures or delayed escape following a response to castration have not occurred); breast cancer (for palliation only in women with progressing inoperable or roentgen resistant disease who are more than 5 years postmenopausal).

"Probably" effective: For estrogen deficiency-induced osteoporosis, and only when used in conjunction with other important therapeutic measures such as diet, calcium, physiotherapy, and good general health-promoting measures. Final classification of this indication requires further investigation.

Contraindications: Short-acting estrogens are contraindicated in patients with (1) markedly impaired liver function; (2) known or suspected carcinoma of the breast, except those cases of progressing disease not amenable to surgery or irradiation occurring in women who are at least 5 years postmenopausal; (3) known or suspected estrogen-dependent neoplasia, such as carcinoma of the endometrium; (4) thromboembolic disorders, thrombophlebitis, cerebral embolism, or in patients with a past history of these conditions; (5) undiagnosed abnormal genital bleeding.

Warnings: Estrogen therapy should not be given to women with recurrent chronic mastitis or abnormal mammograms except, if in the opinion of the physician, it is warranted despite the possibility of aggravation of the mastitis or stimulation of undiagnosed estrogen-dependent neoplasia.

The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, retinal thrombosis, cerebral embolism and pulmonary embolism). If these occur or are suspected, estrogen therapy should be discontinued immediately.

Estrogens may be excreted in the mother's milk and an estrogenic effect upon the infant has been described. The long range effect on the nursing infant cannot be determined at this time.

Hypercalcemia may occur in as many as 15 percent of breast cancer patients with metastases, and this usually indicates progression of bone metastases. This occurrence depends neither on dose nor on immobilization. In the presence of progression of the cancer or hypercalcemia, estrogen administration should be stopped.

A statistically significant association has been reported between maternal ingestion of diethylstilbestrol during pregnancy and the occurrence of vaginal carcinoma in the offspring. This occurred with the use of diethylstilbestrol for the treatment of threatened abortion or high risk pregnancies. Whether or not such an association is applicable to all estrogens is not known at this time. In view of this finding, however, the use of any estrogen in pregnancy is not recommended.

Failure to control abnormal uterine bleeding or unexpected recurrence is an indication for curettage.

Precautions: As with all short-acting estrogens, the following precautions should be observed:

A complete pretreatment physical examination should be performed with special reference to pelvic and breast examinations.

To avoid prolonged stimulation of the endometrium and breasts in climacteric or hypogonadal women, estrogens should be administered cyclically (3 week regimen with 1 week rest period—withdrawal bleeding may occur during rest period).

Because of individual variation in endogenous estrogen production, relative overdosage may occur which could cause undesirable effects such as abnormal or excessive uterine bleeding, mastodynia and edema.

Because of salt and water retention associated with estrogenic anabolic activity, estrogens should be used with caution in patients with epilepsy, migraine, asthma, cardiac, or renal disease.

If unexplained or excessive vaginal bleeding should occur, re-examination should be made for organic pathology.

Pre-existing uterine fibromyomata may increase in size while using estrogens; therefore, patients should be examined at regular intervals while receiving estrogenic therapy.

The pathologist should be advised of estrogen therapy when relevant specimens are submitted.

Because of their effects on epiphyseal closure, estrogens should be used judiciously in young patients in whom bone growth is incomplete.

Prolonged high dosages of estrogens will inhibit anterior pituitary functions. This should be borne in mind when treating patients in whom fertility is desired.

The age of the patient constitutes no absolute limiting factor, although treatment with estrogens may mask the onset of the climacteric.

Certain liver and endocrine function tests may be affected by exogenous estrogen administration. If test results are abnormal in a patient taking estrogen, they should be repeated after estrogen has been withdrawn for one cycle.

Adverse Reactions: The following adverse reactions have been reported associated with short-acting estrogen administration:

- nausea, vomiting, anorexia
- gastrointestinal symptoms such as abdominal cramps and bloating
- breakthrough bleeding, spotting, unusually heavy withdrawal bleeding (See DOSAGE AND ADMINISTRATION)
- breast tenderness and enlargement
- reactivation of endometriosis
- possible diminution of lactation when given immediately postpartum
- loss of libido and gynecomastia in males
- edema
- aggravation of migraine headaches
- change in body weight (increase, decrease)
- headache
- allergic rash
- hepatic cutaneous porphyria becoming manifest

Dosage and Administration: PREMARIN (Conjugated Estrogens Tablets, U.S.P.) should be administered cyclically (3 weeks of daily estrogen and 1 week off) for all indications except selected cases of carcinoma and prevention of postpartum breast engorgement.

Menopausal Syndrome—1.25 mg. daily, cyclically. Adjust dosage upward or downward according to severity of symptoms and response of the patient. For maintenance, adjust dosage to lowest level that will provide effective control.

If the patient has not menstruated within the last two months or more, cyclic administration is started arbitrarily. If the patient is menstruating, cyclic administration is started on day 5 of bleeding. If breakthrough bleeding (bleeding or spotting during estrogen therapy) occurs, increase estrogen dosage as needed to stop bleeding. In the following cycle, employ the dosage level used to stop breakthrough bleeding in the previous cycle. In subsequent cycles, the estrogen dosage is gradually reduced to the lowest level which will maintain the patient symptom-free.

Postmenopause—as a protective measure against estrogen deficiency-induced degenerative changes (e.g. osteoporosis, atrophic vaginitis, kraurosis vulvae)—0.3 mg. to 1.25 mg. daily and cyclically. Adjust dosage to lowest effective level.

Osteoporosis (to retard progression)—usual dosage 1.25 mg. daily and cyclically.

Senile Vaginitis, Kraurosis Vulvae with or without Pruritus—0.3 mg. to 1.25 mg. or more daily, depending upon the tissue response of the individual patient. Administer cyclically.

Abnormal Uterine Bleeding—(irregular, profuse, or prolonged uterine bleeding due to hormonal imbalance).

—*To stop bleeding*, 3.75 mg. to 7.5 mg. daily, in divided doses. Bleeding can usually be expected to stop within two to five days, b if it has not ceased within this time, an increase in dosage by 50 p cent or more is recommended.

—*For Cycle 1*—The dosage required to stop bleeding is cc tinued without interruption for 20 days. Otherwise, breakthrou bleeding will occur. During each of the last 5 to 10 days of estrog therapy, give an oral progestin. Expect withdrawal bleeding in t next two to five days after cessation of therapy.

—*For Cycles 2, 3, 4*—3.75 mg. daily, in divided doses, for 2 days beginning on the fifth day of bleeding, and a progestin give during the last five days of estrogen therapy. Expect withdraw bleeding in the next two to five days after cessation of therapy. Trea ment is usually given during three or four cycles.

Hypogenitalism—In an attempt to bring about sexual and s matic maturation, 2.5 to 7.5 mg. daily, in divided doses for 20 day followed by a rest period of 10 days' duration. If bleeding does n occur by the end of this period, the same dosage schedule is repeate The number of courses of estrogen therapy necessary to produ bleeding may vary depending on the responsiveness of the end metrium.

If bleeding occurs before the end of the 10 day period, begi a 20 day estrogen-progestin cyclic regimen as in Amenorrhea.

Amenorrhea—In order to reproduce the hormone pattern the ovary whereby there is bleeding from a progestational endom trium, begin a 20 day estrogen-progestin cyclic regimen wit PREMARIN, 2.5 to 7.5 mg. daily in divided doses, for 20 days. Durin the last five days of estrogen therapy, give an oral progestin. If bleed ing occurs before this regimen is concluded, therapy is discontinue and may be resumed on the fifth day of bleeding.

Mammary Carcinoma (for palliation in women with progressin inoperable or roentgen resistant disease who are more than 5 year postmenopausal)—Suggested dosage is 10 mg. three times dail for a period of at least three months.

Prostatic Carcinoma (for palliation when castration is not feas ible or when castration failure or delayed escape have not occurred —1.25 to 2.5 mg. three times daily. The effectiveness of therapy ca be judged by phosphatase determinations as well as by symptomati improvement of the patient.

Prevention of Postpartum Breast Engorgement—3.75 mg. ever four hours for five doses, or 1.25 mg. every four hours for five days

How Supplied: PREMARIN (Conjugated Estrogens Tablets, U.S.P

No. 865—Each *purple* tablet contains 2.5 mg., in bottles of 100 an 1,000.

No. 866—Each *yellow* tablet contains 1.25 mg., in bottles of 10 and 1,000. Also in unit dose packages of 100.

No. 867—Each *red* tablet contains 0.625 mg., in bottles of 100 an 1,000.

No. 868—Each *green* tablet contains 0.3 mg., in bottles of 100 an 1,000.

References: 1. Rhoades, F.P.: J. Amer. Geriatr. Soc. 15:346 (Apr 1967. 2. Greenblatt, R.B., in Conn, H.F. (Ed.): Current Therapy 197(Philadelphia, W.B. Saunders Company, 1970, p. 757. 3. Kerr, M.D Mod. Treatm. 5:587 (May) 1968. 4. Astwood, E.B., in Goodman, L.S and Gilman, A. (Eds.): The Pharmacological Basis of Therapeutic ed. 4, New York, The Macmillan Company, 1970, Chap. 69, p. 1538 f 5. Penningroth, R.P., and Tourney, G.: Postgrad. Med. 46:118 (July 1969. 6. Kupperman, H.S.: Medical Aspects of Human Sexuality 1:6 (Sept.) 1967. 7. Tramont, C.B.: Geriatrics 21:212 (Nov.) 1966.

Ayerst. **AYERST LABORATORIES INC.**
New York, N.Y. 10017

PREMARIN®

BRAND OF

CONJUGATED ESTROGENS TABLETS, U.S.P.

containing natural estrogens exclusively

CHESTNUT LODGE

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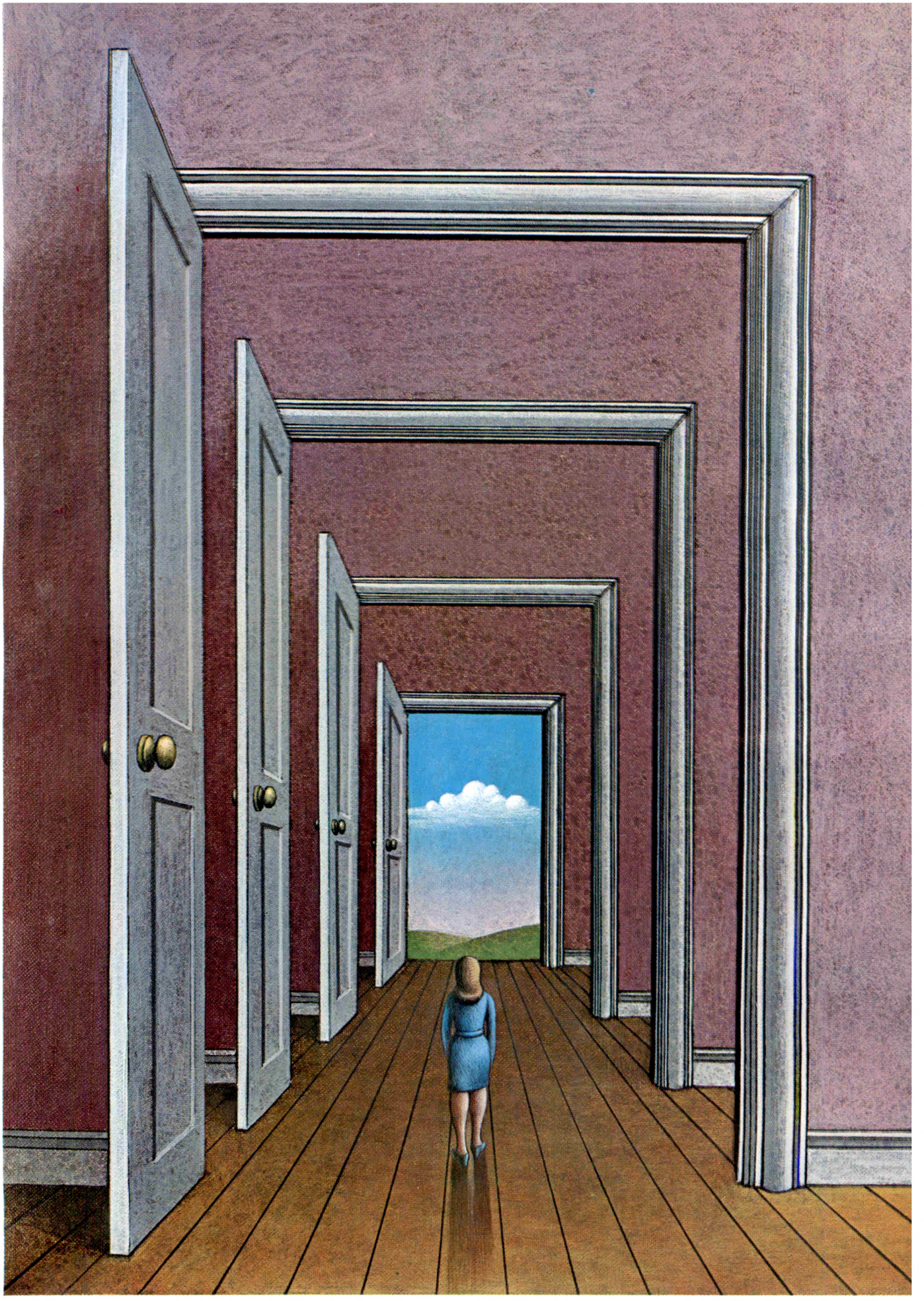
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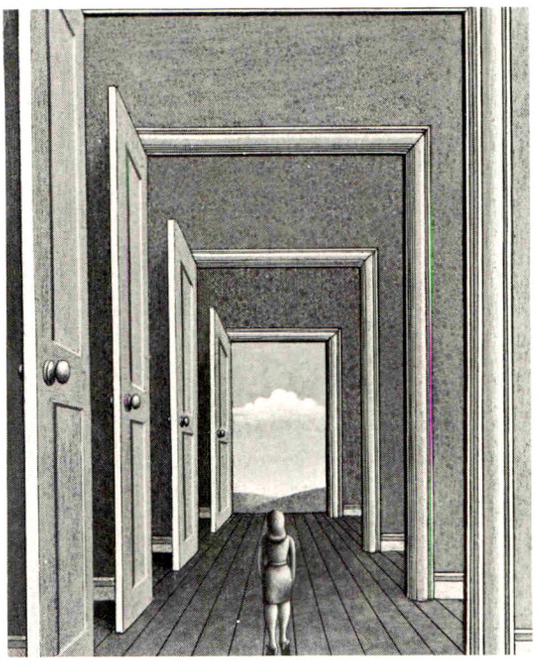
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(See Brief Summary on following page for information on adverse reactions, contraindications, warnings and precautions.)

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DOXEPIN HCl
25-mg. and 50-mg. capsules

THE NEWEST TRICYCLIC ANTIDEPRESSANT—WITH DIFFERENCES YOU CAN SEE.



BRIEF SUMMARY
Sinequan® (doxepin HCl) **Capsules**

Contraindications. Sinequan (doxepin HCl) is contraindicated in individuals who have shown hypersensitivity to the drug.

Sinequan (doxepin HCl) is contraindicated in patients with glaucoma or a tendency to urinary retention.

Warnings. *Usage in Pregnancy:* Sinequan (doxepin HCl) has not been studied in the pregnant patient. It should not be used in pregnant women unless, in the judgment of the physician, it is essential for the welfare of the patient, although animal reproductive studies have not resulted in any teratogenic effects.

Usage in Children: The use of Sinequan (doxepin HCl) in children under 12 years of age is not recommended, because safe conditions for its use have not been established.

MAO Inhibitors: Serious side effects and even death have been reported following the concomitant use of certain drugs with MAO inhibitors. Therefore, MAO inhibitors should be discontinued at least two weeks prior to the cautious initiation of therapy with Sinequan (doxepin HCl). The exact length of time may vary and is dependent upon the particular MAO inhibitor being used, the length of time it has been administered, and the dosage involved.

Precautions. Since drowsiness may occur with the use of this drug, patients should be warned of that possibility and cautioned against driving a car or operating dangerous machinery while taking this drug.

Patients should also be cautioned that their response to alcohol may be potentiated.

Since suicide is an inherent risk in any depressed patient and may remain so until significant improvement has occurred, patients should be closely supervised during the early course of therapy.

Although Sinequan (doxepin HCl) has significant tranquilizing activity, the possibility of activation of psychotic symptoms should be kept in mind.

Other structurally related psychotherapeutic agents (e.g., iminodibenzyls and dibenzocycloheptenes) are capable of blocking the effects of guanethidine and similarly acting compounds in both the animal and man. Sinequan (doxepin HCl), however, does not show this effect in animals. At the usual clinical dosage, 75 to 150 mg. per day, Sinequan (doxepin HCl) can be given concomitantly with guanethidine and related compounds without blocking the antihypertensive effect. At doses of 300 mg. per day or above, Sinequan (doxepin HCl) does exert a significant blocking effect. In addition, Sinequan (doxepin HCl) was similar to the other structurally related psychotherapeutic agents as regards its ability to potentiate norepinephrine response in the animal. However, in the human this effect was not seen. This is in agreement with the low incidence of the side effect of tachycardia seen clinically.

Adverse Reactions. *Anticholinergic Effects:* Dry mouth, blurred vision, and constipation have been reported. They are usually mild, and often subside with continued therapy or reduction of dose.

Central Nervous System Effects: Drowsiness has been observed. This usually occurs early in the course of treatment, and tends to disappear as therapy is continued.

Cardiovascular Effects: Tachycardia and hypotension have been reported infrequently.

Other infrequently reported side effects include extrapyramidal symptoms, gastrointestinal reactions, secretory effects such as increased sweating, weakness, dizziness, fatigue, weight gain, edema, paresthesias, flushing, chills, tinnitus, photophobia, decreased libido, rash, and pruritus.

Dosage. For most patients with illness of mild to moderate severity, a starting dose of 25 mg. t.i.d. is recommended. Dosage may subsequently be increased or decreased at appropriate intervals and according to individual response. The usual optimum dose range is 75 mg./day to 150 mg./day.

In more severely ill patients an initial dose of 50 mg. t.i.d. may be required with subsequent gradual increase to 300 mg./day if necessary. Additional therapeutic effect is rarely to be obtained by exceeding a dose of 300 mg./day.

In patients with very mild symptomatology or emotional symptoms accompanying organic disease, lower doses may suffice. Some of these patients have been controlled on doses as low as 25-50 mg./day.

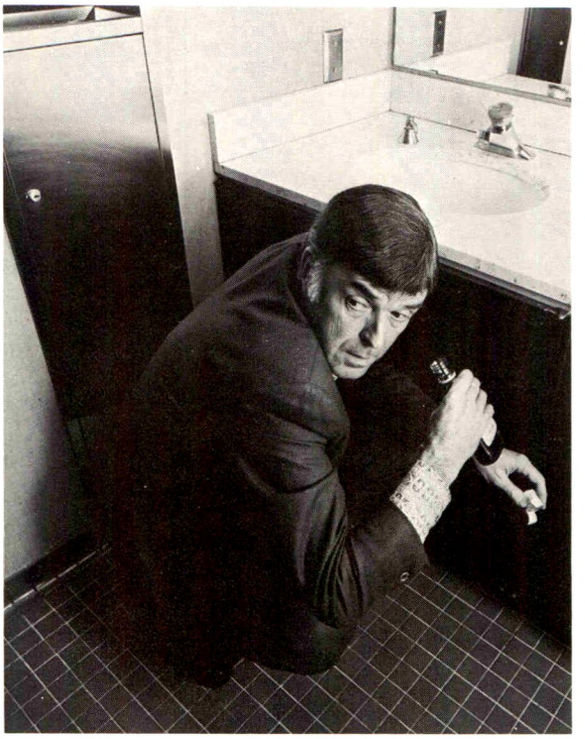
Although optimal antidepressant response may not be evident for two to three weeks, antianxiety activity is rapidly apparent.

Supply. Sinequan (doxepin HCl) is available as capsules containing doxepin HCl equivalent to 10 mg., 25 mg., and 50 mg. of doxepin in bottles of 100 and 1000.

More detailed professional information available on request.

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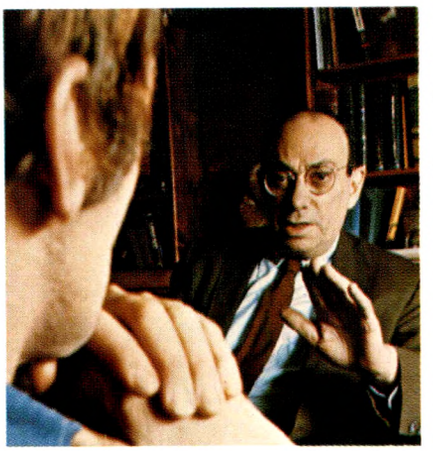
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LA HACIENDA
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The balanced approach in adjunctive drug therapy

Especially relevant in psychiatric practice

The role of anxiety as a psychodynamic force is generally acknowledged, although psychiatrists may differ as to its definition, origin and management. The intensity of anxiety may at times require adjunctive drug therapy for prompt relief of intolerable suffering; abatement of emotional tension, so that rapport and verbal communication may be expedited; and breaking down of stubborn resistances so that maladaptive behavior may



be examined.

But anxiety—in moderation an appropriate accompaniment of growth—need not and should not be diminished to the point of extinguishing its *signal* function. Drug and dosage should be selected so as to allow the maintenance and continuation of a reasonable amount of anxiety as an incentive to motivate participation in psychotherapy and to encourage problem-solving on the patient's own initiative. In this context, the so-called minor tranquilizers, in contrast to major tranquilizers, exhibit a well-tolerated, predominantly anti-anxiety action. Thus, when drug therapy of obstructive anxiety is required, a suitable minor tranquilizer is often recommended.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.

Contraindications: Patients with known hypersensitivity to the drug.

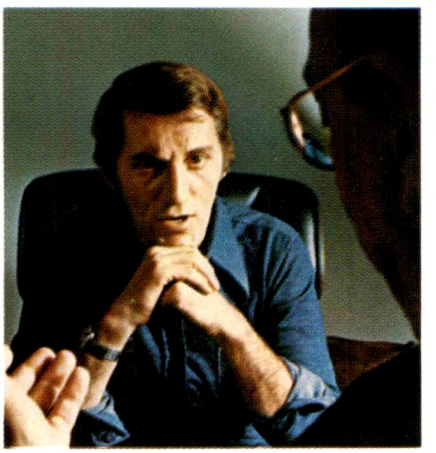
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.,* operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of

Antianxiety action without exaggerated effect

Librium (chlordiazepoxide HCl) dosage meets patient needs

The benzodiazepines are regarded as among the safer and more effective of the antianxiety drugs available. Adjunctive Librium enjoys extensive use in the treatment of clinically significant anxiety. It should be employed flexibly, titrated to the degree of anxiety being experienced by the individual patient. The dosage schedule should have as its goal the maximum relief of disruptive anxiety; when that



has been accomplished, Librium (chlordiazepoxide HCl) therapy should be discontinued. Experience has shown that Librium, in proper dosage, seldom impairs mental acuity or performance. (See Warnings section below.)

Drowsiness, ataxia and confusion are the most common side effects reported, most notably in the elderly or debilitated. Thus, Librium is especially valuable in treating anxiety in the neurotic ambulatory patient with daily responsibilities to fulfill. In most cases, Librium can promptly reduce excessive anxiety to less disruptive levels, making a rational approach to discussion of disturbing psychic material more possible, and encouraging a more positive resolution of the patient's emotional problems.

for control of inappropriate anxiety

Librium®
(chlordiazepoxide HCl)

10-mg, 25-mg capsules t.i.d./q.i.d.

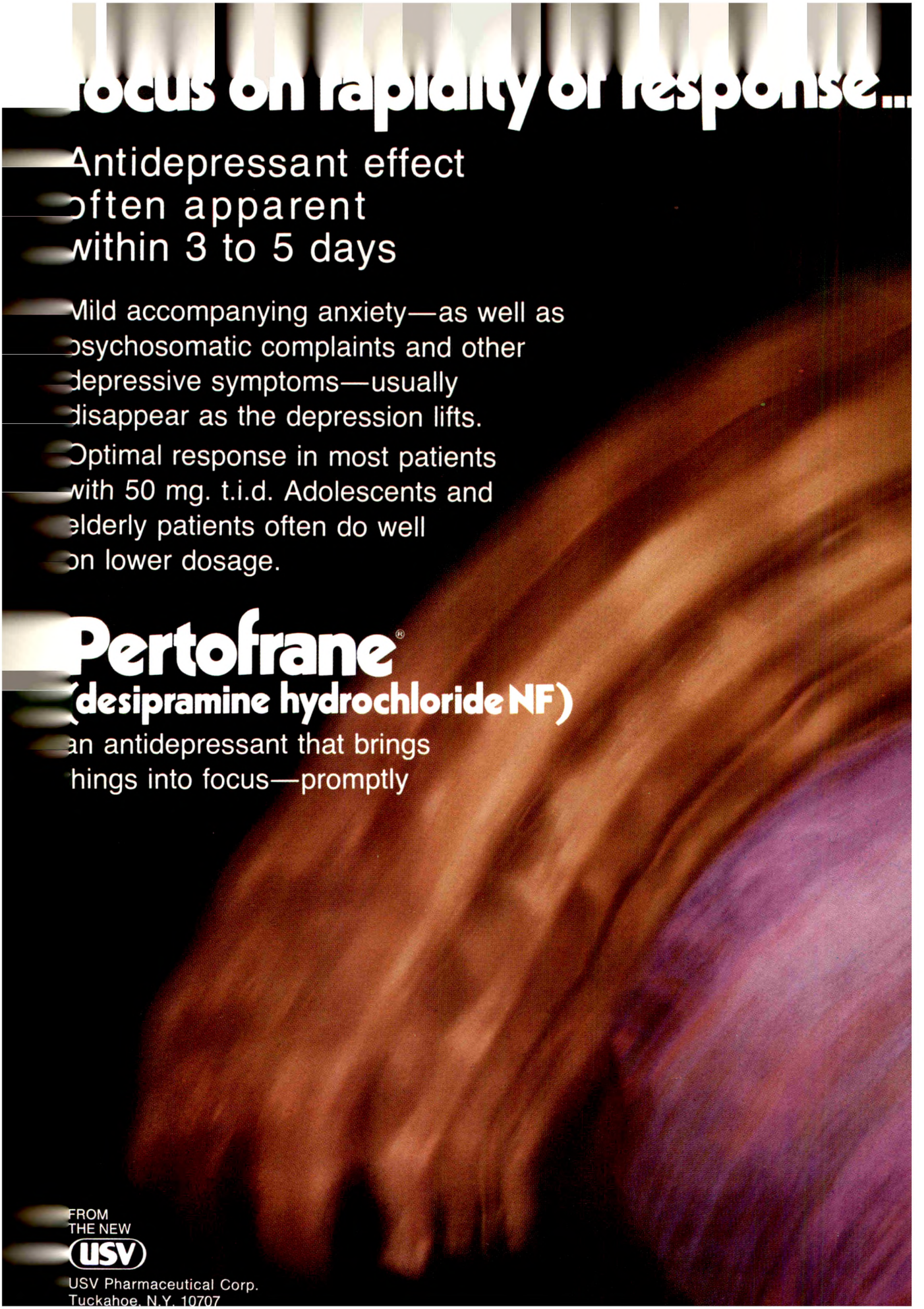
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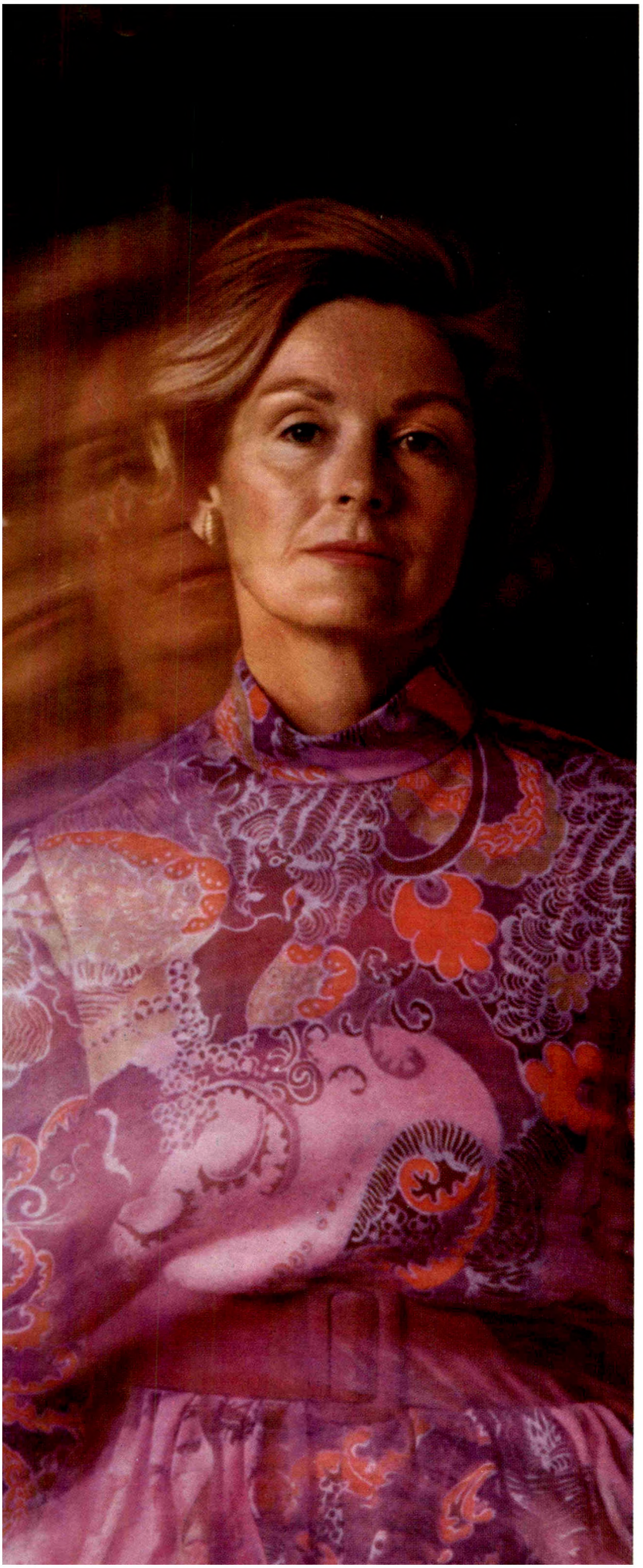
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impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido —all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Supplied: Librium® Capsules containing 5 mg, 10 mg or 25 mg chlordiazepoxide HCl. Libritabs® Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.


ocus on rapidity of response...
Antidepressant effect often apparent within 3 to 5 days
Mild accompanying anxiety—as well as psychosomatic complaints and other depressive symptoms—usually disappear as the depression lifts.
Optimal response in most patients with 50 mg. t.i.d. Adolescents and elderly patients often do well on lower dosage.
Pertofrane®
(desipramine hydrochloride NF)
an antidepressant that brings things into focus—promptly
FROM THE NEW
USV
USV Pharmaceutical Corp.
Tuckahoe, N.Y. 10707

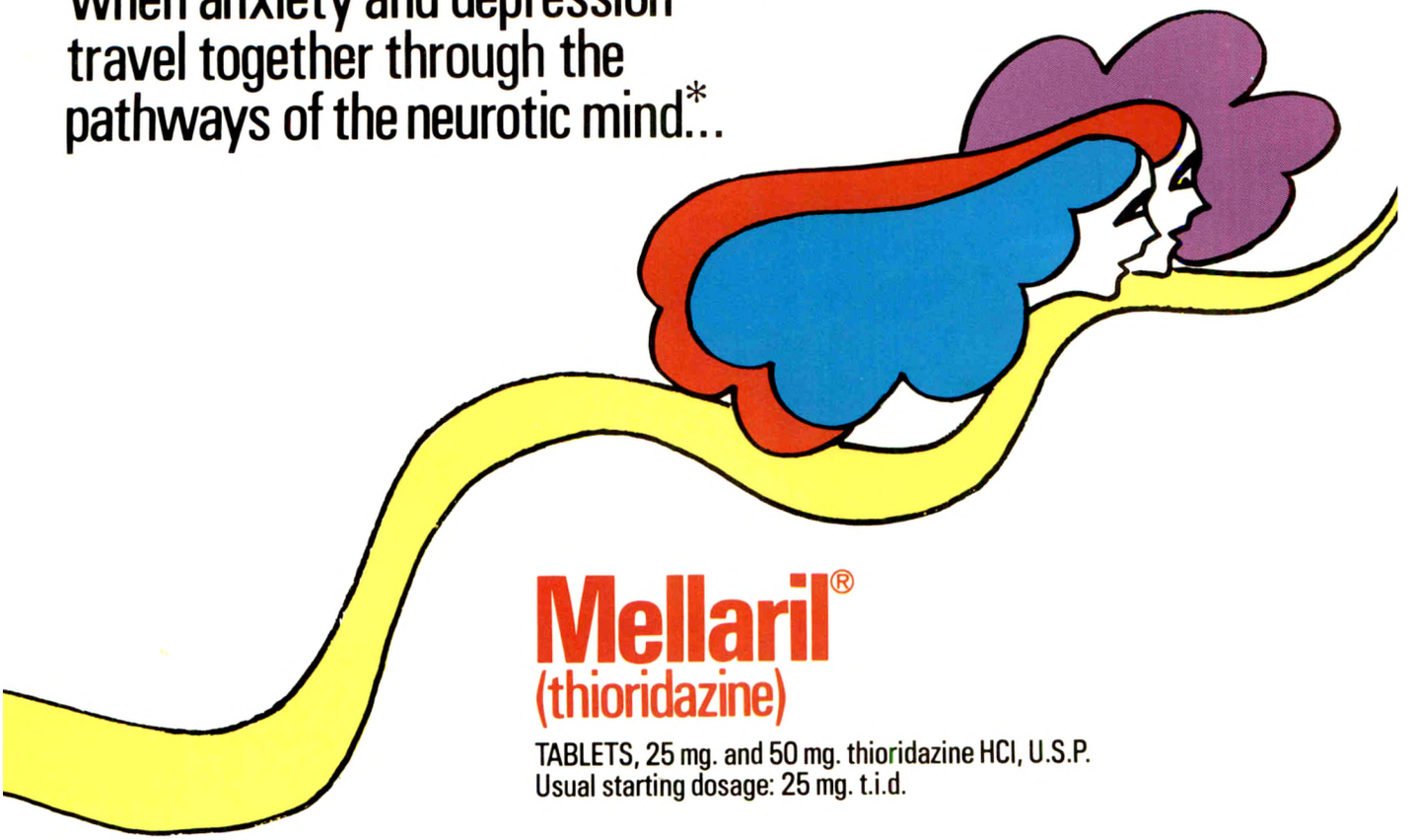


Pertofrane®
(desipramine hydrochloride)

Indication: For relief of mental depression.
Contraindications: Do not use MAO inhibitors concomitantly or within 2 weeks of the use of this drug. Hyperpyretic crises or severe convulsive seizures may occur with such combinations; potentiation of adverse reactions can be serious or even fatal. When substituting Pertofrane in patients receiving an MAO inhibitor, allow an interval of at least 14 days. Initial dosage in such patients should be low and increases should be gradual and cautiously prescribed. The drug is contraindicated following recent myocardial infarction and in patients with a known hypersensitivity to tricyclic antidepressants. **Warnings:** Activation of psychosis may occasionally be observed in schizophrenic patients. Due to atropine-like effects and sympathomimetic potentiation, use only with the greatest care in patients with narrow-angle glaucoma or urethral or ureteral spasm. Do not use in patients with the following conditions unless the need outweighs the risk: severe coronary heart disease with EKG abnormalities, progressive heart failure, angina pectoris, paroxysmal tachycardia and active seizure disorder (may lower seizure threshold). This drug may block the action of the antihypertensive, guanethidine, and related adrenergic neuron-blocking agents. Hypertensive episodes have been observed during surgery. The concurrent use of other central nervous system drugs or alcohol may potentiate adverse effects. Since many such drugs may be used during surgery, desipramine should be discontinued prior to elective procedures. Caution patients on the possibility of impaired ability to operate a motor vehicle or dangerous machinery. Do not use in women who are or may become pregnant, or in children under 12 years of age, unless the clinical situation warrants the potential risk. Because of increased sensitivity to the drug, use lower than normal dosage in adolescent and geriatric patients. **Precautions:** Potentially suicidal patients require careful supervision and protective measures during therapy. Prescriptions should be limited to small quantities. Discontinuation of the drug may be necessary in the presence of increased agitation and anxiety shifting to hypomanic or manic excitement. Atropine-like effects may be more pronounced (e.g. paralytic ileus) in susceptible patients and in those receiving anticholinergic drugs (including antiparkinsonism agents). Prescribe cautiously in hyperthyroid patients and in those receiving thyroid medications; transient cardiac arrhythmias have occurred in rare instances. Periodic blood and liver studies should supplement careful clinical observations in all patients undergoing extended courses of therapy. **Adverse Reactions:** The following have been reported: *Nervous System:* dizziness, drowsiness, insomnia, headache, disturbed visual accommodation, tremor, unsteadiness, tinnitus, paresthesias, changes in EEG patterns, epileptiform seizures, mild extrapyramidal activity, falling and neuromuscular incoordination. A confusional state (with such symptoms as hallucinations and disorientation), particularly in older patients and at higher dosage, may require discontinuation of the drug. *Gastrointestinal Tract:* anorexia, dryness of the mouth, nausea, epigastric distress, constipation and diarrhea. *Skin:* skin rashes (including photosensitization), perspiration and flushing sensations. *Liver:* rare cases of transient jaundice (apparently of an obstructive nature) and liver damage. If jaundice or abnormalities in liver function tests occur, discontinue the drug and investigate. *Blood Elements:* bone-marrow depression, agranulocytosis, thrombocytopenia and purpura. If these occur, discontinue the drug. Transient eosinophilia has been observed. *Cardiovascular System:* orthostatic hypotension and tachycardia. Carefully supervise patients requiring concomitant vasodilating therapy, particularly during initial phases. *Genitourinary System:* urinary frequency or retention and impotence. *Endocrine System:* occasional hormonal effects, including gynecomastia, galactorrhea and breast enlargement, and decreased libido and estrogenic effect. *Sensitivity:* urticaria and rare instances of drug fever and cross-sensitivity with imipramine.
Dosage: All patients except geriatric and adolescent: 50 mg. t.i.d. (150 mg. daily). Dosage may be increased up to 200 mg. daily. Geriatric and adolescent patients should usually be started with lower dosage (25 to 50 mg. daily) and may not tolerate higher doses. Dosage may be increased up to 100 mg. daily. Lower maintenance dosages should be continued for at least 2 months after obtaining a satisfactory response. Mild anxiety and agitation which may accompany depression usually remit as the depression responds. Occasionally, however, a sedative or tranquilizer may be indicated. **How Supplied:** 25 mg. capsules (pink) and 50 mg. capsules (maroon and pink), bottles of 100 and 1000; single-dose blister packs, boxes of 500.

USV Pharmaceutical Corp., Tuckahoe, N.Y. 10707

when anxiety and depression travel together through the pathways of the neurotic mind*...



Mellaril®
(thioridazine)

TABLETS, 25 mg. and 50 mg. thioridazine HCl, U.S.P.
Usual starting dosage: 25 mg. t.i.d.

*Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified this indication as "probably" effective.
Final classification of the less-than-effective indications requires further investigation.

Before prescribing or administering, see Sandoz literature for full product information. The following is a brief summary.

Contraindications: Severe central nervous system depression, comatose states from any cause, hypertensive or hypotensive heart disease of extreme degree.

Warnings: Administer cautiously to patients who have previously exhibited a hypersensitivity reaction (e.g., blood dyscrasias, jaundice) to phenothiazines. Phenothiazines are capable of potentiating central nervous system depressants (e.g., anesthetics, opiates, alcohol, etc.) as well as atropine and phosphorus insecticides. During pregnancy, administer only when the potential benefits exceed the possible risks to mother and fetus.

Precautions: There have been infrequent reports of leukopenia and/or agranulocytosis and convulsive seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmentary retinopathy may be avoided by remaining within the recommended limits of dosage. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., driving), and increase dosage gradually. Orthostatic hypotension is more common in females than in males. Do not use epinephrine in treating drug-induced hypotension since phenothiazines may induce a reversed epinephrine effect on occasion. Daily doses in excess of 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: *Central Nervous System*—Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. *Autonomic Nervous System*—Dryness of mouth, blurred vision, constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. *Endocrine System*—Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. *Skin*—Dermatitis and skin eruptions of the urticarial type, photosensitivity. *Cardiovascular System*—ECG changes (see *Cardiovascular Effects* below). *Other*—A single case described as parotid swelling.
The following reactions have occurred with phenothiazines and should be considered: *Autonomic Reactions*—Miosis, obstipation, anorexia, paralytic ileus. *Cutaneous Reactions*—Erythema, exfoliative dermatitis, contact dermatitis. *Blood Dyscrasias*—Agranulocytosis, leukopenia, eosinophilia, thrombocytopenia, anemia, aplastic anemia, pancytopenia. *Allergic Reactions*—Fever, laryngeal edema, angioneurotic edema, asthma. *Hepatotoxicity*—Jaundice, biliary stasis. *Cardiovascular Effects*—Changes in terminal portion of electrocardiogram, including prolongation of Q-T interval, lowering and inversion of T-wave, and appearance of a wave tentatively identified as a bifid T or a U wave have been observed with phenothiazines, including Mellaril (thioridazine); these appear to be reversible and due to altered repolarization, not myocardial damage. While there is no evidence of a causal relationship between these changes and significant disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients showing characteristic electrocardiographic changes while taking the drug. While proposed, periodic electrocardiograms are not regarded as predictive. Hypotension, rarely resulting in cardiac arrest. *Extrapyramidal Symptoms*—Akathisia, agitation, motor restlessness, dystonic reactions, trismus, torticollis, opisthotonus, oculogyric crises, tremor, muscular rigidity, and akinesia, occasionally persisting for several months or years especially in elderly patients with brain damage. *Endocrine Disturbances*—Menstrual irregularities, altered libido, gynecomastia, weight gain, false positive pregnancy tests. *Urinary Disturbances*—Retention, incontinence. *Others*—Hyperpyrexia; behavioral effects suggestive of a paradoxical reaction, including excitement, bizarre dreams, aggravation of psychoses, and toxic confusional states; following long-term treatment, a peculiar skin-eye syndrome marked by progressive pigmentation of skin or conjunctiva and/or accompanied by discoloration of exposed sclera and cornea; stellate or irregular opacities of anterior lens and cornea.

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THE AMERICAN JOURNAL OF PSYCHIATRY

Learning Disabilities: An Overview

BY LLOYD J. THOMPSON, M.D.

The expression "learning disabilities" is widely used and easily understood, but it may be applied to various handicaps. The author discusses the details of one particular handicap—reading disability—with implications that apply to the whole group in general. He emphasizes the concept that the fundamental basis of specific reading disability or dyslexia is usually found in inherent maturational lags rather than in brain damage or environmental influences. Although developmental lags do produce brain dysfunction, the author states the objections to the use of such terms as "brain damage" and "minimal brain dysfunction," which connote brain pathology. The concept of developmental lags is more accurate and more constructive.

THE TERM "learning disabilities" may be applied to a variety of difficulties encountered in the learning processes. It has wide usage, but perhaps it is too broad and not specific enough. The focus of attention in this dissertation will be concerned with a condition or syndrome characterized by specific difficulty in learning to read, spell, and write. Other difficulties in the realm of speech and hearing (word hearing) as well as motor disturbances, such as dyspraxia and hyperkinesis, are often present in the syndrome. Reading and spelling difficulties, however, are the presenting and most important symptoms. Not infrequently, secondary emotional and behavioral disorders mask the true nature of the handicap and may be the reason for referral.

Several names have been given to this syndrome. Among them are congenital word blindness, specific reading disability, specific language disability (SLD), developmental dyslexia, visuo-motor perceptive disorder, minimal brain dysfunction (MBD), neurologically impaired or handicapped child, brain-damaged child, and aphasoid child. This list is not complete, but a perusal of the literature under any of these titles reveals that in most instances we are talking about the same child or the same condition.

Because of this seeming confusion in terminology, the extensive bibliographies in five important books recently published on the subject were studied to see what designations were used by the authors cited. Out of 812 references, the wording in the titles fell under one of the following headings: reading disability = 504 (62 percent), dyslexia = 138 (17 percent), learning or language disability = 124 (15 percent), and brain damage or dysfunction = 46 (six percent).

It was gratifying to find the great preference for the simple, practical, and understandable term "reading disability." It was also gratifying to see "dyslexia" come in second, with "brain damage" running a poor fourth. Since I am medically oriented, I prefer the term "developmental dyslexia" or, for brevity, "dyslexia." In this word, "dys-" means hard or difficult, and "-lexia" is derived from the Greek word *lexikos*, which means "pertaining to words." Difficulty with words and the letters therein—whether spoken, written, or read—is the essence of dyslexia.

Regardless of the diagnostic label, there is general agreement that at least ten percent of children have some degree of specific reading disability. In 1965, the National Institute for Neurological Diseases and Blindness (1) stated that, from information obtained in this country and abroad, the figure of ten percent for specific dyslexia in children is "probably a reasonable estimate." Also, among these children, boys outnumber girls in a ratio of about five to one.

Without going into details about the symptomatology, it is obvious that these children must be two or more years retarded in reading, according to standard reading tests, but score higher in tests not involving reading. Their oral reading is apt to be word-by-word in a stilted manner, with hesitations and many guesses, and some may be nonreaders. In spelling, they reveal the earmarks of the handicap. They tend to spell "by ear"—showing

This paper was written at the invitation of the Editor.

Dr. Thompson is Clinical Professor Emeritus of Psychiatry, University of North Carolina, Chapel Hill, N.C., and Chairman of the Advisory Council of the Orton Society. His address is Kings Mill Rd., Chapel Hill, N.C. 27514.

their poor visual memory. There are reversals, omissions, and transpositions of letters. A "b" becomes a "d," an "m" becomes a "w," the word "was" may be "saw," and the word "girl" may be spelled "gril." A confusion in directionality and sidedness may exist, and there may be a tendency toward mirror-reading and mirror-writing. In addition to poor reading and spelling, these children may have delayed or imperfect speech, a poor ear for words, and clumsiness in handwriting or other movements.

When this condition is mentioned, questions as to cause invariably ensue. An attempt to provide answers will be made by starting with a review of the history of concepts.

HISTORY OF CONCEPTS

When W. Pringle Morgan (2), an English family physician, gave the first definitive description of reading disability in 1896, it was under the title, "congenital word-blindness." He said that the condition was "evidently congenital and due most probably to defective development of that region of the brain, disease of which in adults produces practically the same symptoms, that is, the left angular gyrus."

Immediately other English physicians, mostly ophthalmologists, published papers under the same title—all agreeing that the disorder must be due to some "agenesis" in the brain. James Hinshelwood, an ophthalmologist in Glasgow, continued these studies and, in 1917, published a book entitled *Congenital Word-Blindness* (3). He too maintained that the condition was due to a lack of development in the brain and was not caused by any disorder in the eyes. It is probable that all these early writers visualized some neuropathological changes in the brain that would someday be demonstrated.

It is interesting that, in 1891, Sigmund Freud (4), then a neurologist and not a psychoanalyst, stated in his monograph *On Aphasia:*

> There were cases of aphasia in which no localized lesion needed to be assumed and the symptoms could be attributed to an alteration of a physiological constant. Aphasia simply reproduces a state which existed in the course of the normal process of learning to speak and read (p. 55).

During the two decades from 1896 to 1916, other physicians in Germany, the United States, and elsewhere published articles on "congenital word-blindness," but no contributions from educators or psychologists could be found. Augusta Bronner (5), the psychologist in the first child guidance clinic, published her book, *The Psychology of Special Abilities and Disabilities*, in 1917. She gave attention to reading, spelling, and speech—reporting on observations in cases of reading disability with all the characteristics of dyslexia. She considered reading disability as being analogous to disabilities in other sensory and motor functions.

In 1918 Leta Hollingworth, an educational psychologist, wrote an article on "The Psychology of Special Disability in Spelling" (6). She expressed the opinion that this handicap is "the very fag end of the normal distribution of spelling ability." Then, in 1923 in her book, *Special Talents and Defects* (7), she discussed reading talents and defects. She recorded in detail her four-year study of a nonreader and said:

> We see therefore that non-readers, of general intelligence much above the minimal level required for reading, do learn to read when special training is given. This training may stress phonics (Schmitt), it may stress the motor and kinesthetic avenues of approach (Fernald and Keller), or it may stress visual perception (Gates). . . . It seems highly probable that the best method would be that wherein all avenues of approach are fully utilized (7, p. 89).

Concerning the cause, Hollingworth said the claim of Hinshelwood and others that it is due to a lesion or agenesis was "irreconcilable with facts known to psychology." Explaining this important observation, she stated:

> Cases where a generally stupid child is innately gifted with special ability to master the mechanics of reading, for example, are no doubt as frequent as cases where a generally capable child learns them with difficulty. The theory of specialized lesions or other faults of structure might cover disabilities, but would it cover special talents as well? (7, p. 52.)

In commenting on the pertinence of Hollingworth's question, I have pointed out elsewhere that, in cases of eidetic imagery, perfect pitch, or mathematical wizardry, we do not find hyperplasias in certain brain areas to account for the talent.

In 1925, the Research Committee of the Commonwealth Fund, chaired by William S. Gray (8), a noted authority on reading, published their report, *Summary of Investigations Related to Reading.* Out of 436 references in the report, there was one to Hinshelwood but none to the numerous other contributions from the medical profession. Reading retardation was recognized and numerous causes were listed, but "word blindness" or "specific reading disability" received no attention.

At that time, and later, Gray listed the following causes of reading retardation: irregular school attendance, malnutrition, poor health, nervous disorders, nationality, inappropriate methods of instruction, visual defects, auditory defects, and defects in brain tissue. Still later, Gray added other causes, but apparently he did not recognize the specific syndrome of dyslexia. Of course, any of the above-listed factors may retard reading and learning in general, but they are not likely to single out reading and spelling, or to produce the symptoms characteristic of dyslexia.

At this point in the history of concepts, it remained for Samuel T. Orton (9), an American neuropsychiatrist and neuropathologist, to shed further light on the problem. Starting in 1925, Orton continued to study and write about specific language disabilities until his death in 1948. He produced more than 30 articles on the subject, as well as his classic book, *Reading, Writing and Speech Problems in Children* (10). He disagreed with Hinshelwood and others about an agenesis or brain lesion and

proposed the concept that these specific language disorders are due to developmental lag.

Orton said that an important part of this delayed maturation is a failure to establish unilateral brain superiority with definite dominance on one side. The resulting confused laterality accounts for such symptoms as reversals of letters and words, poor directionality, mirror-reading, disturbances of "body image," etc. He also claimed that speech disorders, word deafness, distortions of time and space perceptions, and poor motor coordination were often a part of the syndrome. He recorded the existence of language disabilities, confused dominance, and other symptoms of dyslexia in the family histories of his patients. Working with Marion Monroe and Anna Gillingham, Orton was the first to develop a well-rounded program for remedial reading.

Not infrequently today we hear criticisms or outright rejection of Orton's explanations. It appears that some of the critics have not read Orton's writings, while others have taken points out of context. Usually, the opposition centers around what Orton said about confused dominance, and the objectors are thinking in terms of handedness rather than brainedness. They overlook the fact that many of the characteristics of dyslexia are the very symptoms of confused dominance.

Lauretta Bender, who had her training in psychiatry under Orton, has elaborated on many aspects of dyslexia (11). She continues to look upon dyslexia as being the result of maturational lag, with plasticity and the potentiality for further growth. Bender has had extensive experience with brain-damaged children and has been outstanding in pointing out the difference between brain damage and maturational lag.

Members of the medical profession in other countries have made notable contributions with concepts similar to those of Orton. Outstanding has been Macdonald Critchley, the eminent English neurologist. In his recent book *Developmental Dyslexia* (12), Critchley stated:

> Within the heterogeneous community of poor readers (slow readers, retarded readers), there exists a specific syndrome wherein particular difficulty exists in learning the conventional meaning of verbal symbols, and of associating the sound with symbol in appropriate fashion. . . . This syndrome of developmental dyslexia is of constitutional origin, and it is often—perhaps even always—genetically determined. It is unlikely to be the product of damage to the brain at birth, even of minor degree (p. 18).

OTHER CONCEPTS

It would seem that the above statement of Critchley might settle the issue, but there remain many divergent viewpoints and even resistance to recognition of such a specific handicap. It is not uncommon today to hear the opinion that if a child can't learn to read and spell, he must be quite dim or just isn't trying. Others who recognize the condition hold that the cause must lie either in brain damage or in the way the child was reared or taught. The possibility of developmental lag is overlooked or rejected.

For example, Rudolph Flesch, whose book *Why Johnny Can't Read* (13) was a best seller in the 1950s, held the concept that all reading retardation stems from the method of teaching. Flesch stated:

> Do you know that there are no remedial reading cases in Germany, in France, in Italy, in Norway, in Spain—practically anywhere in the world except in the United States? Do you know that the teaching of reading was never a problem anywhere in the world until the United States switched to the present method around about 1925? (p. 7.)

Many writers continue to claim that reading disability is attributable to emotional or environmental factors. Articles have appeared in the psychoanalytic literature under such titles as "learning disability" or "learning impotence." The first article in the *International Journal of Psychoanalysis* in which reading was the topic appeared in 1930 under the title, "Some Unconscious Factors in Reading" (14). The author, James Strachey, pointed out oral and anal factors that might be related to reading. He said that, in children with a reading disability, certain impulses are unstable or incompletely repressed, so that the act of reading threatens to bring about the release of these urges in their original primitive form. Strachey and later writers postulated that, in the child's unconscious, reading may have the significance of taking knowledge out of the mother's body; thus, fear of robbing her is an important factor for inhibition in reading.

Subsequent writers in the psychoanalytic field brought out other interpretations: relating reading disability to scoptophilia (peeping), to sadism, to special hostilities, to relation with one's mother or father, and to ego development. It is recognized that psychogenic factors may produce disturbances of vision, but usually this is in the form of hysterical blindness or tubular vision—not the reversal of symbols or the confused directionality found in dyslexia.

Writers from other disciplines continue to report on environmental influences as the cause of reading disability. The list given above in connection with the ideas of Gray covers the main areas of blame. They blame not only parents and teachers but a multitude of other factors.

Studies of deprived or disadvantaged children reveal that many of them are retarded in learning when they enter school and may never catch up. It is claimed, too, that most of these deprived children seemed to be on a par in development with other children during the first year or two of life. Some deprived children are labeled as having a reading disability because reading and spelling are the main subjects by which they are judged while, in reality, they may have a general learning retardation.

There is evidence that dyslexia has a causal role (often unrecognized) in school dropout, unemployment, and poverty. Therefore, many of the parents of today's deprived children may have been forced into poverty areas by their dyslexia, and so the handicap is passed on from generation to generation. It is doubly difficult for a dys-

lexic child to escape from the ghetto. Deprived children may suffer also from an "atrophy of disuse" during the optimum time of learning in the preschool years—thus producing a developmental lag. However, that this would be limited to the field of dyslexia seems unlikely. Let it be noted that, on the basis of general incidence, one in ten of the deprived children, as well as the mentally retarded children, would be expected to have some degree of dyslexia.

BRAIN DAMAGE CONCEPT

It is admitted that symptoms of dyslexia resulting from brain damage may occur in children, but this is very unusual. Dyslexia as a part of, or a kind of, aphasia due to brain damage was recognized long ago, but in most instances this happens in older people—often as a result of vascular accidents.

In recent years, there has been an increasing interest in the role of perinatal disturbances in brain damage. Poor nutrition and other abnormalities in the mother, birth trauma, anoxia, prematurity, infections in the newborn, and other disorders may produce brain damage. Kawi and Pasamanick (15) found that in 16.6 percent of 205 children with reading disability, there had been complications of the pregnancy, while in a control group of normal readers complications were found in only 1.5 percent. In the early literature on congenital word blindness, several writers mentioned prenatal factors and birth injuries when discussing causes. At the present time, books and articles are being published under the title "brain-damaged children," while the content is about dyslexic children. Here, too, perinatal disorders receive a large portion of the blame for the alleged damage, although later head injury and encephalitis may be called into account.

However, a point not emphasized before to my knowledge is that, if one side of the brain is damaged in the first year or two of life, the other side takes over the functions of the damaged one, especially with regard to language functions. Lord Brain (16) and others have attested to this developmental phenomenon. Moreover, Critchley (12) has stated:

> Specific dyslexia has nothing to do with perinatal trauma nor with fetal infection, fetal damage, anoxia, or icterus neonatorum. Of course, a patient with genetically determined dyslexia may also have a history of perinatal trauma, but this is a coincidental element in the case (p. 17).

Head injury often bears the brunt of blame for mental retardation and behavioral disorders, including delinquency. This is particularly true when parents want an answer that is not apt to create guilt feelings. That a fall from a high chair would single out for damage only the brain areas concerned with language functions is extremely remote.

Concerning encephalitis, let me cite my own experiences. In 1919, when I started my training in psychiatry at the Boston Psychopathic Hospital, epidemic encephalitis was rampant. We recognized the sequelae of this disease in children by their hyperkinesis, loss of inhibition, distractability, and gross behavioral problems. Some ten years later, after reading an article by Orton, I began finding specific language disabilities in some of these children who had had encephalitis. I collected 30 cases for study and later wrote an article entitled "Specific Disabilities in Children with Organic Brain Pathology" (17). At that time I was convinced that brain damage was the usual cause of specific language disabilities. However, with the passing of the epidemics, with more case studies, and with a broader outlook, I came to the conclusion that brain damage plays a very minor role in dyslexia. I had been guilty of thinking mainly in terms of psychogenic factors versus brain pathology, without consideration of constitutional factors in the realm of developmental lags.

Only sporadic and limited epidemics of encephalitis have occurred in the past four decades. Encephalitis accompanying infectious diseases of childhood, particularly measles, occurs in only a small number of cases. The elimination of measles will probably not diminish the incidence of dyslexia. Moreover, I have searched in vain to find a clear-cut case where the child had learned to read and spell before some alleged brain insult and then lost only this facility. Perhaps there are such cases, but they must be rare.

DIAGNOSIS OF BRAIN DAMAGE

In diagnosing brain damage, we consider the medical history, the neurological examination, the psychological studies, the EEG and X-ray findings, and clinical observations. It is contended, however, that positive findings in any of these fields may be due to developmental lags. The history of an illness or accident may be clear-cut, but the symptomatology is frequently nebulous and open to question.

The so-called "soft neurological signs" often come from developmental lags rather than from brain damage. Common to all infants is a positive Babinski sign, a tonic neck reflex, and other responses considered abnormal later on. Bender made the following observations:

> Children with severe reading disabilities show lags in neurological patterning or "soft neurological signs" also; they are awkward in their motor control and motility, and retain immature tonic-neck-reflex attitude for a longer time than other children do. Their motor tone is more variable; electroencephalographic patterns are of the dysrhythmic, immature type . . . and personalities are immature, impulse-ridden, and dependent, so that they are often taken for post-encephalitic, retarded, or schizophrenic children (11, p. 11).

Clinical psychologists may report certain test findings as indicative of organic brain disorder when, in reality, they come from maturational lag. Some of the responses on the Wechsler Intelligence Scale for Children are in this group, and the same may be true of primitive performances on the Draw-A-Person test. More specifically, some abnormalities on the Bender-Gestalt test may be

considered as evidence of brain pathology. According to Bender's own statement, however, in the performances of children with specific reading disability figures tend to be more primitive, more fluid, and full of movement of the primitive, vortical, whirling type; squared figures become rounded; dots are replaced by loops; diamonds are squared; oblique lines become vertical or sometimes even horizontal. She mentioned other observations, such as disorientation on the background and a tendency to close open figures. We know that she attributed all these distortions to maturational lag.

Concerning EEG patterns, many experts in the field agree that dysrhythmias and other deviations found in children below the age of six, or even eight, do not have the significance that they have later on. Here again, some clinicians look upon such variations as evidence of brain injury.

Among clinical observations in children, hyperactivity is receiving more and more attention. That hyperkinesis, even in outspoken degree, may be a manifestation of maturational lag rather than of brain disease has received only slight recognition. The majority of children pass through a definite stage of hyperactivity. Frequently, by the age of three hyperactivity may "simmer down," only to have a resurgence in the fourth year and continue into the early school years. Arnold Gesell stated:

> The 3-year-old is conforming. The 4-year-old is assertive and expansive. He bursts with motor activity: racing, hopping, jumping, skipping, climbing.... As an expansive 4-year-old he was constantly going out to meet his environment, making his thrusts in an almost harum-scarum manner (18, p. 56).

Gesell admitted that not all children conform to his age schedules and that hyperkinesis may persist through the early school years. R.L. Jenkins wrote on this topic:

> The hyperkinetic or hyperactive reaction is widely recognized in child psychiatry. It is disproportionately frequent before the age of eight and tends gradually to become less frequent and less prominent thereafter. It usually disappears by the middle teens.... There is no present justification for assuming that all cases are due to organic brain damage (19, p. 1032).

To the above statement, it can be added that many hyperkinetic children do not have a specific language disability, and not all dyslexic children are hyperactive. In fact, there is a growing tendency to consider hyperkinesis as a syndrome by itself.

One more item for consideration in relation to brain damage is the question of autopsy findings. I have heard physicians remark that someday a definite case of dyslexia will come to autopsy and then we shall know. With one person in ten, or even 20, having symptoms of dyslexia, thousands of cases have been autopsied, yet expert neuropathologists have reported no specific neuropathology related to developmental dyslexia. These same experts do not miss the lesions in older people who have had some form of aphasia, including dyslexia.

Recently, Norman Geschwind (20) demonstrated that an area which lies behind the primary auditory cortex in the upper surface of the temporal lobe (Wernicke's area) is larger on the left side in 65 percent of brains, but larger on the right side in 11 percent. This is an anatomical difference, not a lesion, and it appears to be genetically determined. It could be that, in the remaining 24 percent where no appreciable difference exists, an anatomical basis for language disability may be found.

The above observations about brain damage do not preclude the possibility that some biochemical disturbance may be basic in developmental dyslexia. It is generally accepted that nervous system activity depends on a chemical reaction—usually with one element present in the neuron and the other from without. Some disabilities of this type have been recognized. Several studies support the hypothesis that there is a biochemical process associated with learning, and with retention of information (memory). In color blindness, neurons in the cones of the retina fail to supply the element necessary to produce full color vision. The expression "lazy cones" suggests that elsewhere in the nervous system there may be "lazy neurons."

ANALOGOUS CONDITIONS

Color blindness, just mentioned, is analogous to dyslexia in many respects. It can be considered to be a developmental lag with an inherent biological basis. The newborn has no color vision and the disability "runs in families." There are varying degrees and kinds of color blindness. Rarely is it complete, wherein the person sees only black and white, or gray. About eight percent of boys, but less than one percent of girls, have some form and degree of color blindness—figures similar to those for the incidence of dyslexia. Rarely is it due to a brain lesion, and it is not caused by injury or disease in the eyes. It is not related to environmental or emotional influences. Let it be added that a color-blind person may improve his color vision through appropriate training and practice.

Analogous, too, are the cases of "word deafness" and extreme awkwardness (dyspraxia), both of which may be part of the total syndrome of dyslexia or may appear to be separate entities. "Tone deafness," with its varying degrees, suggests other disabilities in music, such as a poor sense of time or a shallow inner resonance for melody or harmony. Dyscalculia (disability in mathematics) is another example. Few people know about "taste blindness" for compounds of phenylthiocarbamide (PTC), which is genetically determined. Many speech disorders fall within the syndrome of dyslexia and, here again, the cause may not be found in emotional problems or in brain damage.

More and more evidence is being presented to show that autism in children is based on a combination of developmental lags. An outstanding feature of autistic children may be their great difficulty in understanding spoken words (word deafness), but they have many other lags, including those present in dyslexia. Perhaps their in-

ability to relate to other people stems from maturational lag. Without adding more examples, let it be stated that developmental lags are possible in all avenues of sensory input and in capacity for output in motor and emotional responses. There may also be lags in the inner elaborations between input and output.

HEREDITY

The use of the title "congenital word-blindness" by the early writers indicates that they considered the syndrome to be of congenital origin. Literally, "congenital" means acquired during development in the uterus or during birth, but several of these writers mentioned hereditary aspects and gave family histories to prove the point. Orton, from his first paper in 1925, repeatedly gave family histories and diagrams of family trees that showed the existence of language disabilities and confused dominance among the relatives.

Scandinavian researchers have given pertinent evidence as to the existence of genetic factors in dyslexia. Bertil Hallgren (21) of Sweden, in a study of 276 cases, found reading problems in one or more relatives in 88 percent of the cases. Moreover, Edith Norrie (22), in Denmark, and Hallgren studied twins—their combined total of pairs investigated was 45—of whom 12 pairs were monozygotic and 33 were dizygotic. Concordance was 100 percent in the former group and 30 percent in the latter. Hallgren concluded that developmental dyslexia follows a monohybrid autosomal dominant mode of inheritance. Knud Hermann (23), a co-worker of Norrie, stated in his book, *Reading Disability*: "It is highly probable that the specific pathogenic factor must be sought in heredity, whereby a predisposition to the underdevelopment of this function is transmitted in certain families by means of a dominant inheritance" (p. 179).

PROGNOSIS

With early recognition and adequate remedial reading instruction, a large majority of dyslexic children attain sufficient ability to read, for all practical purposes, but their typical spelling errors usually persist. Even without skilled tuition, some find their way around the handicap and improve as they grow older. This statement is not meant to condone a "wait and see" attitude. Without proper attention these children experience great frustration and often develop compensations of an undesirable type. There can be no doubt that unrecognized or untreated dyslexia plays an important role in school failure, school dropout, unemployment, poverty, and delinquency.

On the positive or optimistic side, Margaret Rawson (24) did a follow-up study of 20 dyslexic boys, all of whom had attended a private school where they had received remedial reading instruction according to the Orton-Gillingham system. All of them had gone on to college and, except for two, had gained degrees—several of them beyond the bachelor's degree level. Moreover, I have collected evidence (25) that several men of eminence probably had specific language disability. Among them were Thomas Edison, Harvey Cushing, Woodrow Wilson, William James, Albert Einstein, Lawrence Lowell, George Patton, Auguste Rodin, and Paul Ehrlich. There are others, some of whom are living, on my list.

In speaking about prognosis in developmental dyslexia, Critchley said, "There is no justification for anything less than optimism provided only that dyslexics are correctly diagnosed at an early age, and are granted without delay the services of special remedial teaching at the hands of sympathetic experts" (26, p. 121).

TREATMENT

Critchley's statement indicates that remediation of dyslexia falls mainly in the province of education. Early recognition is highly important, and it has been proven that tests and observations will usually reveal which children are going to have difficulty with reading when they enter the first grade. In addition to screening for physical health before school entrance, all children should be studied psychologically to identify their special abilities and disabilities. Much of this can be done by group tests, but tests that will reveal the probability of language difficulty should be included. For the dyslexia-prone child, the kindergarten can provide special activities and instruction that may be helpful.

All too frequently; dyslexia is not recognized until after the child has entered school, and sometimes not until he has gone to the fourth grade and beyond. To meet this situation, special classes and even special schools have been used. However, in addition to preschool screening, the ideal arrangement is to have ungraded classes with team teaching, wherein the language arts teacher is fully qualified in remedial reading and knows enough about dyslexia to be able to enter into the diagnostic process.

Details about remedial reading cannot be gone into here but the basic principle is the phonic approach, with emphasis on the alphabet, the sound and vision of letters, and their combinations in syllables and words. Visual learning is reinforced at the same time by other sensory modalities; the child says the letter or word aloud, traces it digitally, and may write it down. There is much more to remedial reading and, of course, the reading material, as well as the personality of the teacher, is important. The "talking typewriter," or even an ordinary typewriter, may be a helpful adjunct.

Psychotherapy may be needed, especially when secondary symptoms are troublesome, but it should be combined with remedial reading. A first step in therapy is an explanation—to the child and his parents—of the true nature of the handicap, making use of analogous examples such as color blindness or tone deafness, and making sure to dispel misconceptions about brain damage or parental fault. Of course, the school and the teachers may be at fault if they do not provide proper tuition.

Courses in speed reading are not for dyslexics. Al-

though often turned to, they only illuminate the handicap and increase the frustration. Motor exercises designed to improve coordination, while helpful in general, play no important role in correcting dyslexia. The Delacato program, with emphasis on "patterning" exercises, has been found to be of little direct benefit according to a study by the American Academy of Pediatrics (27). While confused laterality is common in dyslexia, attempts to change handedness, eyedness, or footedness are not indicated.

Drug therapy for learning disabilities is being advocated with increasing enthusiasm. The use of amphetamines to control hyperkinesis started in 1939, and its paradoxical action has not been adequately explained. If hyperactivity and distractability are diminished, a child can then better apply himself to any learning task. That amphetamines have any direct effect on reading ability is doubted. As noted before, hyperkinesis may be one of many manifestations of maturational lags and sometimes occurs along with dyslexia. The use of amphetamines to control hyperkinesis in a dyslexic child so that he can get on with his learning may be indicated in some cases, but certain studies have shown that the drug is beneficial to less than one-half of all hyperkinetics. Also, amphetamine habituation does occur, and there is no proof that children are entirely immune to such habit formation.

COMMENT

Although psychiatrists and other members of the medical profession may not be involved in the direct treatment of learning disabilities, they should be knowledgeable in this field. They should be able to participate constructively in the diagnosis and recommendations for treatment of these handicaps. Finally, it is urged that due consideration be given to the role of inherent maturational lag, so that the diagnosis does not rest solely on differentiation between environmental factors and brain damage.

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Early Stress and Later Response to Separation in Rhesus Monkeys

BY LAURENS D. YOUNG, M.D., STEPHEN S. SUOMI, PH.D., HARRY F. HARLOW, PH.D., AND WILLIAM T. MCKINNEY, JR., M.D.

The hypothesis that separation in early life predisposes one to later psychopathology was tested using two groups of rhesus monkeys of similar age. The experimental group had undergone the stress of early life separation and confinement in a vertical chamber. The experimental animals responded to separation and reunion with increased self-mouthing, self-clasping, huddling, and rocking. The control group responded to separation with increased locomotion and responded to reunion with increased contact clinging and proximity behaviors. The implications of these findings are discussed.

SEPARATION EXPERIENCES in early life have long been regarded in psychiatric theory and practice as traumatic events that can predispose individuals to psychopathology later in life (1, 2). In general the validity of this relationship has not been questioned (3). However, while psychiatric evidence obtained through a retrospective anamnesis may well have established the importance of separation in early life to the psychological functioning of the adult, it has also been criticized for making it appear that certain sequelae proceed inevitably from a given event (4). We know, for example, that not every individual who experiences a difficult separation in infancy eventually develops serious psychopathology. It therefore behooves investigators to regard the relationship between adult psychopathology and trauma in early life as a hypothesis and to attempt to establish experimentally whether such a relationship exists. Some have suggested that separation in early life may "leave scars" that sensitize individuals to adverse reactions to later separation (5). The experiment reported in this paper is a controlled laboratory investigation of this hypothesis in nonhuman primates.

Various efforts have been made in recent years to supplement the retrospective method in human beings with other types of studies. For example, Sethi obtained information on both childhood separations and separation experiences occurring within six months prior to the onset of depression in 116 patients (6). He found that 63 percent of the patients who scored high on a clinical inventory of depression had had a history of antecedent separation, whereas only 14 percent of those who scored low on the inventory had had such an experience. On the same inventory, 67 percent of the patients who scored high had had a separation experience before the age of 16, whereas only 37 percent of those who scored low had had such an experience. Finally, 44 percent of the patients who scored high had had *both* early and recent separation experiences, compared with 11 percent of those who scored low.

In a group of 120 hospitalized patients, Levi found significantly more incidents of separation before the age of 16 in patients who actually attempted suicide than in those who did not attempt suicide (7). The data in this study also suggested that there was a significantly higher incidence of separation experience before the age of seven in persons who actually attempted suicide than in those who only had an impulse to commit suicide.

Hill and Price compared 1,483 depressed patients with 1,028 nondepressed patients (8). They found a significantly higher incidence of loss of father by death before the age of 15 in the depressed group. A number of additional studies have found some positive relationship between the early loss of a parent and psychiatric disturbance in later life (9–11).

Birtchnell (12), in comparing 500 hospital admissions with a matched sample of 500 persons from the surrounding community, found a higher incidence of parent death before the age of five in the patient population. He also found a higher than expected incidence of recent parent death in the hospital population (13). Birtchnell failed to find a preponderance of early or recent parent death in patients with a diagnosis of depression, although these events were significantly higher in the subpopulation with *severe* depression (14). Moreover, his statistics indicated that early and recent parent death contributed to the incidence of suicide attempts in patients, independently of a diagnosis of depression (15).

Not all studies have indicated a positive relationship between early life events and psychiatric disturbance in later life (16–18). For example, Hudgens compared 40 depressed patients with 40 closely matched controls and failed to show any differences in the incidence of stressful events in early life (19).

Read in part at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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This work was supported by Public Health Service grants MH-11894 and MH-18070 and Research Scientist Development Award MH-4753 (to Dr. McKinney) from the National Institute of Mental Health.

The authors wish to express their appreciation to Elaine Moran and Robert Eising for their assistance with this project.

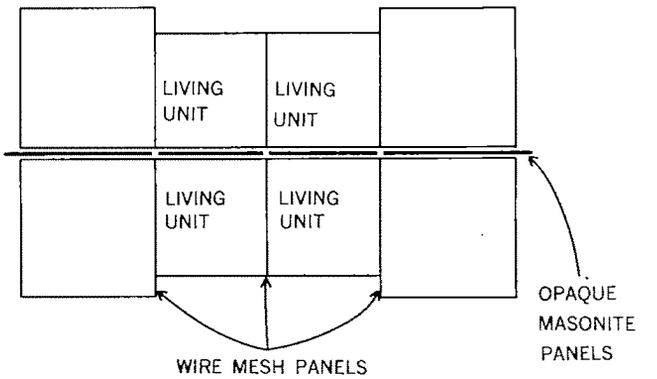
Other studies have indicated that the relationship between early life events and psychopathology is very complex. Paykel and associates have suggested that events of an "exit" type contribute more significantly to depression than do "entrance" events (20). A recent study by Cadoret and associates (21) comparing two groups with unipolar depression showed that, although there was no significant difference between the two groups in the actual incidence of such separation experiences as death, divorce, or separation of the parents, those patients whose onset of symptoms occurred before age 40 and who had certain other distinguishing characteristics showed a higher incidence of the *reporting* of a loss.

Many clinicians have established through intensive direct observation that dramatic behavior changes can occur in infants and young children who have undergone a major separation experience (22–24). Freud and Dann (25) studied a group of six children over a three-year period after their release from a concentration camp. Initially the children showed a high degree of attachment to each other and hostility toward the adults around them. It was only after several months that more typical child-child and child-adult behaviors began to appear. Spitz described a syndrome of "anaclitic depression" occurring in 19 of 123 children between six and 11 months of age in a foundling home (26). He postulated that this syndrome was caused by separation from the mother and could become irreversible if it was not remedied by replacement of a suitable mother or surrogate.

Bowlby characterized the human infant's response to maternal separation as occurring in three stages: "protest," "despair," and "detachment" (3). Such observations imply that loss in infancy might affect the adult individual's response to subsequent separation, but such follow-up studies are rare and give scattered results. Bowlby and associates (27) collected data on 60 children aged six to 14 hospitalized in a tuberculosis sanitarium for periods of several months and found very little indication of severe emotional impairment in adult life. Other investigators, however, on the basis of observations of institutionalized children (28, 29), have found evidence for lasting intellectual and emotional impairment that persisted into adolescence. Such studies are confounded by a complexity of variables, such as the age at separation, parent-child relationships before and after the separation, and the relative conditions of the environments (30).

In recent years some effort has been made to circumvent the difficulties involved in human clinical studies by creating animal models for human psychopathology (31–33). Nonhuman primates provide a useful model for some aspects of human behavior because of their closeness to man, their tendency to form close social bonds, the existence of a fund of knowledge about their social behavior, and the availability of suitable laboratory methods for well-controlled longitudinal studies. Early work using rhesus monkeys established the importance of the infant's tie to its mother (34). Experimental separation from the mother (35) produced a syndrome in rhesus monkeys that closely resembled the behavior of human infants described by Spitz and Bowlby. Replication of the separation experiment with other species has demonstrated a similar response to separation, with some species variation (36, 37). In the rhesus monkey, the species used in this study, the "protest" stage is characterized by frequent cooing vocalizations and increased locomotion. This stage is followed by a period of "despair," consisting of decreased locomotion and increased self-clasping, self-mouthing, and huddling. The final stage of "detachment" described in humans by Bowlby has not yet been reproduced in monkeys.

FIGURE 1
Cage Assembly of Experimental Living Unit



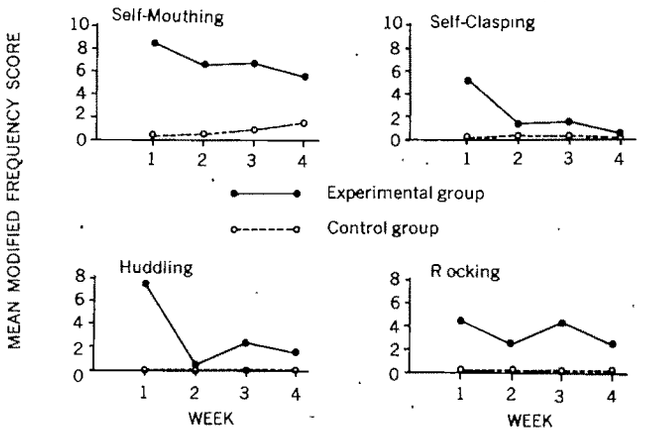
Separation from the mother before one year of age and confinement in a Harlow vertical chamber is a method that has proved effective and reliable in producing abnormal behavior in infant monkeys (38, 39). For example, monkeys 45 days of age placed in this chamber exhibit markedly abnormal behavior on removal. They are socially withdrawn, have low levels of locomotion, and exhibit high levels of self-mouthing, self-clasping, and huddling behavior.

This study attempts to assess whether such stress in early life predisposes rhesus monkeys to pathological behavior later in life when they are subjected to separation stress. Subjects who had early life separation and vertical chamber confinement were compared with subjects who had had normal laboratory rearing. The hypothesis was that these "traumatic" events early in life would predispose the subjects to more severe reactions to the stress of separation later in life.

METHOD

Two groups, each consisting of four rhesus monkeys almost two years of age, were used as subjects. The two groups had had different rearing experiences. The monkeys in the experimental group had been taken from their mothers at birth and housed in individual cages with cloth surrogates. They had been permitted two hours of peer experience per day throughout the first year of life. Between five months and ten months of age each subject

FIGURE 2
Self-Mouthing, Self-Clasping, Huddling, and Rocking During Separation



was placed in a vertical chamber (40) for 30 days of profound environmental isolation. Following the period of internment each subject was returned to its living cage. Beginning at one year of age, the experimental subjects were housed as a group in a wire mesh cage, where they remained until the start of the present experiment. In summary, they had undergone experimental early life separation and the stress of confinement in a vertical chamber early in life.

At the start of the experiment the subjects in the control group were approximately the same age as those in the experimental group. They had been reared with their mothers for the first month of life. From one month until one year of age they had lived in a large cage complex with their mothers, with two hours of daily social interaction with each other. From one year of age until the start of the experiment they were housed together without their mothers as a group of four. Therefore they were matched with the experimental group in terms of age and peer experience after one year of age but differed regarding early life separation and vertical chamber experience.

During the present experiment each group of four monkeys was housed together in a large experimental living unit, a series of cages joined end-to-end, in which the animals could both live and be tested without being moved to a strange environment. The cage assembly is shown in figure 1. The spaces between the cages permitted insertion of wire mesh partitions that divided each large unit into four smaller cages. When the wire mesh panels were removed, the open ends allowed free access through the entire length of the unit. Opaque masonite panels were placed between the two large cage assemblies to prevent visual and tactile communication between the experimental and control groups.

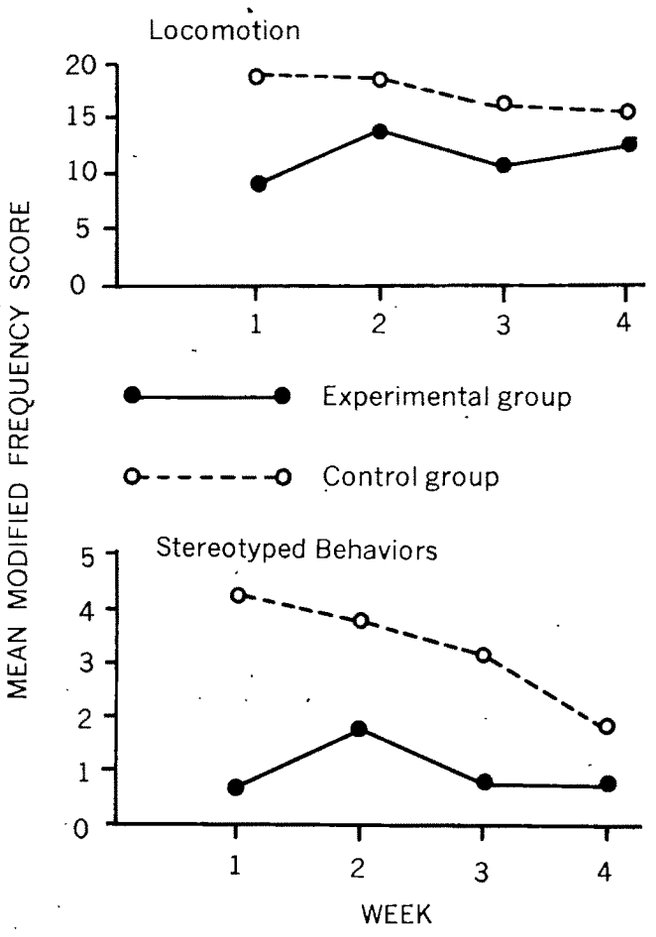
The experiment was divided into two time periods: a four-week period of baseline observation, called the preseparation period, followed by a four-week experimental period. During the preseparation period observations were made on four days each week while the monkeys had free access to each other and to their half of the entire cage assembly.

The experimental period was further divided into separation and reunion conditions. The subjects were housed individually 23 hours per day under the separation condition and were together one hour per day under the reunion condition on the days of observation. They were housed individually all day long on the remaining days.

During the separation condition the wire panels were slid into place so that each monkey was separated from his peers. Observations were made four times per week on each of the monkeys housed in this manner. Under the reunion condition the wire mesh panels were removed so that the monkeys had free access to each other and the full cage assembly. Observations were also made on the monkeys in this condition four times per week.

Behavioral observations were made on each animal for a five-minute period each morning on four days per week during the preseparation period. Similar five-minute observations were made of each subject as it was individually housed in the morning during the separation period and in the afternoon during the reunion condition. The five-minute observation periods were divided into 20 15-second intervals. Any of the operationally defined behavior categories that occurred during these intervals were scored as modified frequencies, that is, as the number of

FIGURE 3
Locomotion and Stereotyped Behaviors During Separation



15-second intervals in which a behavior occurred. The use of this scoring system has been described previously in some detail (41). Operational definitions of the behavioral categories used are given in appendix 1.

For each animal a weekly mean modified frequency score was calculated thus: the total weekly number of responses of a given subject in a given category divided by four, the number of observation periods in the week. Behavior categories that consistently had scores of zero or nearly zero were omitted from the remaining analysis. For each of the remaining categories a two-way repeated measures analysis of variance was performed for each of the three experimental conditions (preseparation, separation, and reunion). The prior rearing condition (experimental versus control) was the independent variable. Time blocks of two weeks for the preseparation condition and blocks of one week for the separation and reunion conditions were the repeated measures. The .05 level of confidence was designated as the criterion of statistical significance for each analysis. In those cases in which significance was reached or almost reached and more than two means were involved in the calculation of the mean square, a Duncan New Multiple Range test was used to compare the means with each other (42).

RESULTS

Preseparation Condition

Four behavioral categories showed significant group effects during the preseparation condition. These were self-mouthing, locomotion, stereotyped behavior, and yielding. None of the other categories showed significant differences between the groups during this condition. The experimental group showed consistently higher levels of self-mouthing ($p < .01$). The control group showed higher levels of locomotion, stereotyped behavior, and yielding ($p < .05$).

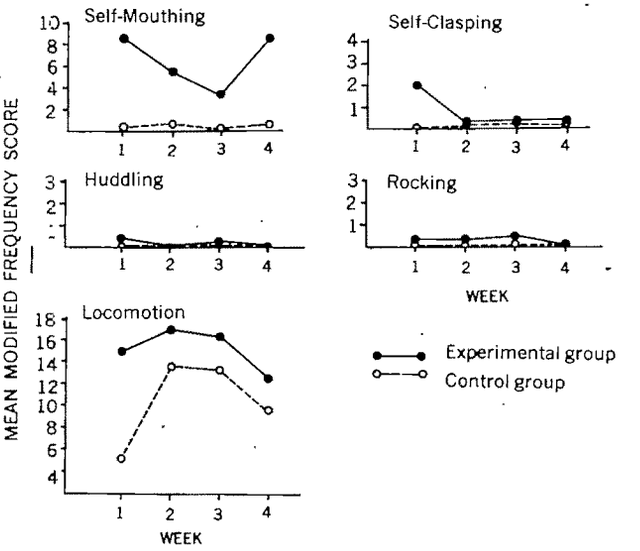
Separation Condition

Under this condition, since the animals were alone, six social behaviors logically could not occur: yielding, contact cling, proximity, social exploration, social sex, and play. These were, therefore, excluded from the analysis of this condition. The experimental group showed significantly higher levels of self-mouthing and huddling ($p < .05$) during separation. The experimental group also showed higher levels of two other behaviors that did not reach significance—self-clasping and rocking. For self-mouthing the difference between the groups for the first week was significant by the Duncan test ($p < .05$). For rocking, the between-group differences for all four weekly means were significant by the Duncan test ($p < .01$). These differences are shown in graphic form in figure 2.

Self-clasping, huddling, and rocking were almost never shown by the controls. On the other hand, the control group showed higher levels of locomotion ($p < .05$) and stereotyped behavior ($p < .01$) during the separation condition. These differences are illustrated in figure 3.

FIGURE 4

Self-Mouthing, Self-Clasping, Huddling, Rocking, and Locomotion During Reunion



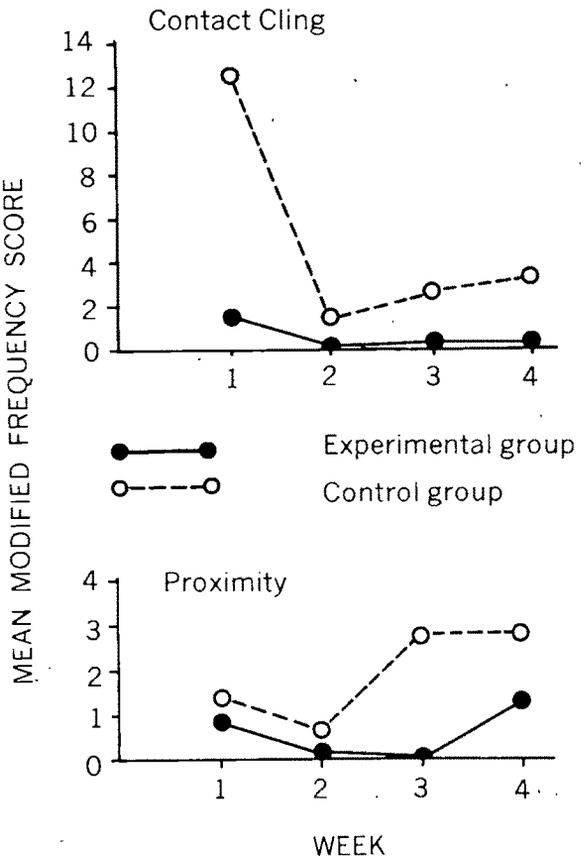
Reunion Condition

There were significant group differences for the following four behaviors, with the experimental group showing higher levels during reunion: self-mouthing and locomotion ($p < .01$) and rocking and self-clasping ($p < .05$). The experimental group also displayed some huddling, which was absent among the controls. The behavior categories for reunion in which the experimental group showed higher levels are illustrated in figure 4. The group means for proximity and contact cling behaviors are illustrated in figure 5. During reunion the control group showed significantly more contact clinging and proximity behaviors than the experimental group.

DISCUSSION

The results of this experiment indicate that several behavioral distinctions can be made between a group of four two-year-old rhesus monkeys with a history of early life separation and vertical chamber confinement and a group of monkeys raised with their mothers and with peers. Throughout all conditions of the experiment—preseparation, separation, and reunion—a higher rate of self-mouthing behavior was observed among the experimental group than among the controls. This tendency toward self-orality has been noted before in rhesus monkeys raised without mothers from birth (43). Self-mouthing is also commonly observed in infant rhesus monkeys immediately following vertical chamber confinement (44). The observation of high rates of this behavior under varying experimental conditions in older monkeys who have had separation and chambering experiences very early in life, and the virtual absence of self-

FIGURE 5
Contact Cling and Proximity During Reunion



mouthing in monkeys of similar age who have not had such experiences, indicates that self-mouthing may be a stable behavioral trait related to early history.

The experimental imposition of conditions of separation and reunion revealed further behavioral differences between the two groups that appeared to be labile and dependent on the condition. Separation conditions caused the experimental animals to react with dramatic increases in self-clasping, rocking, and huddling, behaviors that were almost never seen in the control group. Such "despair-like" responses are similar to those reported in infant macaques undergoing maternal separation and vertical chamber confinement for the first time (44). The pattern resembles the stage of "despair" described by Bowlby. In some respects, therefore, our imposition of the stress of separation from peers in these older monkeys appears to have "unmasked" or at least intensified a response to stress that probably developed in very early life.

The group of monkeys raised with mothers and peers, on the other hand, showed none of the "despair-like" behaviors of the experimental group. These animals responded to separation with an increase in locomotion and stereotyped behavior. This response is similar to that observed in monkeys reared with mothers and peers who are separated for the first time at three years of age (45). The dramatic response in the control animals was observed under reunion conditions. On being allowed access to each other again after separation, the control group showed higher levels of contact clinging and proximity behavior than the experimental animals. This response has been reported previously in animals undergoing reunion after separation, and it might be regarded as a typical pattern of response to reunion for juvenile monkeys raised with mothers and peers (46). The experimental group, on the other hand, did not respond with such high levels of these "closeness" behaviors, but rather with a higher level of locomotion than the control group. It appeared that separation and chambering inhibited their capacity to respond to reunion in the usual way.

The above findings are best viewed as tentative, we hope provocative, and suggestive for further research. Additional work is necessary to extend the generality of our hypothesis. Certainly, however, the marked tendency of rhesus monkeys with a history of maternal separation and vertical chamber isolation early in life to respond to separation with behaviors remarkably like those displayed in early life is supportive of our hypothesis. It remains to be seen whether such behaviors will appear in animals with similar histories at more advanced stages in life. In future studies, more emphasis will be placed on the important effect peer groups have on the final behavioral response, and appropriate measures will be taken to control for this. Work is currently under way in our laboratory to determine to what extent other forms of separation stress will tend to recapitulate the "despair-like" behavioral responses in monkeys with a history of early life stress.

Certainly it is difficult to analogize directly to human behavior but our findings may point to fruitful areas for exploration. The remarkable similarity of the syndrome produced in older monkeys by chambering to that displayed when they were young should cause us to look for behavioral similarities in follow-up data on adults who suffered clearly traumatic manifestations as a result of separation or environmental deprivation in childhood. Few studies of this sort have been reported (30). Our data indirectly support previous studies in human subjects that show a relationship between human psychopathology and the combination of separation in early life and recent separation (6, 12–15).

It appears that early and later life experience can combine to have a powerful influence on primate behavior, in man as well as monkeys. What remains to be decided is not whether such a relationship exists but how it comes to be.

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APPENDIX 1

Definitions of Behavioral Categories

Self-mouthing: Oral contact with any part of the body except the genital area, excluding biting.

Self-grooming: Discrete self-directed picking and/or spreading of the fur.

Self-biting: Specific, vigorous, self-directed biting.

Self-clasping: Firm manual or pedal clutching of self, excluding the genital area.

Passivity: Maintaining a static position for a minimum of three seconds with no other simultaneous behavior.

Huddling: Self-enclosed fetal-like position incorporating any or all patterns of self-clasping, self-embracing, or lowered head.

Rocking: Repetitive, nonlocomotive backward and forward movement.

Vocalization: Coo—drawn-out, dove-like cry in a variety of pitches; screech—high intensity vocalization resembling a scream.

Yielding: Oriented movement or withdrawal by an animal submitting or ceding area to another animal.

Stereotyped behavior: Identical movements maintained in a rhythmic and repetitive fashion for at least three cycles; scored independently and noninclusive of locomotion.

Locomotion: Ambulation of one or more full steps.

Environmental exploration: Any tactual or oral exploration of the physical surroundings.

Proximity: Standing within three inches of another monkey for a period of three or more seconds.

Contact cling: Maintaining gross body contact for an indefinite period of time.

Tardive Dyskinesia: Side Effect or Not?

BY JOHN P. CURRAN, M.D.

The author briefly reviews the literature on the relationship between the administration of phenothiazines and the appearance of tardive dyskinesia. He presents three case reports which illustrate that the relationship is not understood well enough to justify labeling tardive dyskinesia as a side effect of phenothiazines.

WITHIN SIX YEARS after the introduction of the phenothiazines, three neurological side effects were clearly recognized to result from the administration of these medications: dystonia, akathisia, and parkinsonism (1). While these side effects differed somewhat in sex distribution and in age of onset, all had in common the property of disappearing when the phenothiazine in question was discontinued. It was this feature which led to their identification as side effects.

Currently there is less agreement about the significance of the "tardive dyskinesia" syndrome, i.e., a characteristic array of involuntary movements, which allegedly appears late in the course of treatment with phenothiazines. These movements especially, but not exclusively, involve the perioral region; hence the syndrome has been termed "perioral dyskinesia." Many clinical reports have been published, such as the series of patients described by Faurbye and associates (2). Two reviews of the literature are also available that discuss, among other things, the more controversial aspects of this syndrome. Since most observers agree that patients demonstrating the involuntary movements in question can be identified in selected populations, and that there is no effective treatment as yet (3, 4), most of the controversy involves questions of etiology, prevalence, and outcome. There is wide agreement that tardive dyskinesia is "irreversible."

A number of factors have been implicated in the onset of this movement disorder (2, 3). Brain damage from lobotomy or from multiple courses of electroshock treatment (EST) is cited as a cause. A small percentage of cases are said to be acutely and directly precipitated by even a few EST treatments. On occasion the syndrome appears to occur "spontaneously" in elderly patients who do not have a history of shock treatment, lobotomy, or phenothiazine ingestion. The role of phenothiazines in the genesis of this syndrome is especially unclear. Crane, who has published extensively on the subject, notes that the syndrome may appear during, after, or upon resuming treatment. Kline states that he has observed the syndrome to occur after treatment with nonphenothiazine medications, such as antidepressant drugs with anticholinergic activity or amphetamines (4). Elsewhere it has been suggested that an occasional case of acquired hepatocerebral degeneration may be mistaken for tardive dyskinesia (5). Finally, a recent report has suggested that disruption of dental proprioception may be a factor in those cases in which perioral symptoms are especially prominent (6).

One criterion of a side effect is its temporal relationship to a specific treatment modality. Perhaps the most intriguing aspect of the tardive dyskinesia syndrome is that, when a clear link to administration of phenothiazines has been observed, the relationship is paradoxical: the syndrome appears or becomes worse when phenothiazines are discontinued. Faurbye and associates commented on this in passing (2), and Kennedy published a case report that clearly illustrates this puzzling feature of tardive dyskinesia (7). Crane and associates also refer to this phenomenon in other papers (8–11).

In this report I will describe three outpatients, all of whom experienced the onset of the syndrome shortly after discontinuing moderate doses of phenothiazine derivatives, which each had been taking for at least one year. These cases are presented to illustrate that the link between tardive dyskinesia and phenothiazines is not clear-cut enough to be termed a side-effect relationship.

CASE REPORTS

Case 1. This 47-year-old divorced woman appeared at the Mental Health Center of Hennepin County General Hospital on April 17, 1969, after not having been seen for several years, complaining, "I couldn't hold my job because I couldn't stand still." She stated that she had stopped all of her medications (15 mg. of trifluoperazine and 150 mg. of chlorpromazine per day) one month previously and that involuntary movements had appeared one week later and had become progressively worse. Eventually she was fired: "They said I was too nervous."

Her medical history was unremarkable, but she did have a history of mental illness dating from 1950, when she first experienced hallucinations and delusions. She was treated with several courses of EST. Eventually she was hospitalized at Rochester State Hospital in Minnesota, where her course was stormy. After 28 or more ESTs did not produce improvement, a modified Grade IV prefrontal lobotomy was performed in December 1952. There was initial improvement, but once again she became difficult to manage. Forty-eight more ESTs followed. Finally, she was started on reserpine and was eventually discharged in November 1955.

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She was first seen at Hennepin County General Hospital in February 1963, complaining of "an inferiority complex." Despite constant ideas of reference and persecution she had managed during the previous six years to marry and to hold a job. It was felt that her condition represented post-lobotomy paranoid schizophrenia. She was started on 24 mg. of perphenazine per day, then 12 mg. of trifluoperazine per day, but she did not reappear until I interviewed her in April 1969.

The mental status examination revealed a tall, thin, not unattractive woman with a tense, strained expression, complaining of involuntary movements. Vigorous rocking to-and-fro, which could be voluntarily controlled, was accompanied by simultaneous tapping movements of the feet. No movements of the arms or mouth were present. She was pleasant, cooperative, not paranoid, and lucid, and she demonstrated insight regarding why she was fired. My initial impression was that she was not psychotic but was experiencing the tardive dyskinesia syndrome. The possibility of acquired hepatocerebral degeneration masquerading as tardive dyskinesia was ruled out by testing her hepatic functioning.

I decided to resume her medications despite the absence of psychosis to see whether the movement disorder could be controlled, starting with 4 mg. of trifluoperazine per day. When no change was noted by April 22, the dosage was increased to 10 mg. per day. Eight days later she reported improvement. Trifluoperazine was increased once more to 15 mg. per day. On May 7, she demonstrated no involuntary movements during the interview, but was observed pacing beforehand. At her request, 100 mg. of chlorpromazine per day was added and was subsequently increased to 150 mg. per day. On May 27 she reported that she had returned to work. Occasional restlessness of her left leg was present, and during the latter stages of the interview she began to rock. On June 23, nine weeks after I first saw her, she described complete recovery. At this point, she was still taking 15 mg. of trifluoperazine as well as 150 mg. of chlorpromazine per day. During the interview she initially rocked, then sat upright and quite still. Her posture was graceful rather than rigid. She appropriately requested sleeping medications. Occasional sucking motions of the lips were present, but no jaw movements. She appeared completely free of the presenting movement disorder. Ten months later her condition was unchanged, with approximately the same dosage of phenothiazines.

The diagnosis of paranoid schizophrenia seems unquestionable, although it was remarkable how cooperative the subject was during her treatment, and how reliable her self-observations were. One cannot rule out the possibility that she was simply experiencing prepsychotic anxiety and agitation, since perioral movements were not a prominent part of the picture and the rocking was quite similar to that occasionally seen in acutely agitated patients. On the other hand, the chief complaint of involuntary movements, the foot-tapping associated with the rocking, and the absence of complaints of anxiety and agitation all pointed to tardive dyskinesia as the more likely diagnosis.

Case 2. This 66-year-old widow was seen in the outpatient department on August 1, 1969; she had stopped her medications two months previously because of her religious convictions as a Christian Scientist. She was brought in by relatives who noted that she was delusional again, expressing the belief that she was going to be imprisoned for filling out income tax forms incorrectly.

Her history indicated that in 1964, following the death of her husband, she tried to commit suicide by walking into a river. She was committed to Anoka State Hospital in Minnesota in April 1965, after a history of auditory hallucinations was elicited; she was diagnosed there as having an involutional depression. In March 1966, she was discharged on unknown medications; she worked thereafter as a night clerk in a board-and-care home. An exacerbation of her illness occurred in August 1966, and she was diagnosed as having chronic schizophrenia upon admission to Hennepin County General Hospital. She was returned to Anoka State Hospital and was discharged in January 1967 on a daily dose of 1000 mg. of chlorpromazine, 20 mg. of trifluoperazine, and 2 mg. of benztropine mesylate. She was seen in the medication clinic here eight months later and her medications were renewed. She was not seen again until she was brought in by her relatives.

The mental status examination (by John Docherty, M.D.) revealed an elderly woman who admitted to impaired memory. Her affect was flat. A marked perioral dyskinesia was present. After her admission, other observers noted perioral dyskinesia with clipped speech, athetoid movements of the tongue, akathisia, and tasikinesia.

On August 6, she was seen by me in consultation. I noted that she was alert, waited for cues, and appeared to be somewhat shy and retiring. She manifested unsteadiness of her torso, a tendency to caress her hair and face in a stereotyped way with her left hand, and constant mouth motions without protrusion of her tongue. No rigidity or tremor was present. A diagnosis of acute psychotic reaction was made, as well as tardive dyskinesia. Her liver function was tested and was unremarkable.

Administration of 225 mg. of chlorpromazine per day was begun, but was stopped in favor of 6 mg. of haloperidol per day when sedation and hypotension were noted. On August 11, occasional involuntary mouth motions were present, as well as distinct unsteadiness of the trunk. Two days later she appeared to be pleasant, agreeable, and well oriented, with some restlessness of arms and torso still present. By August 19, all signs of psychosis had disappeared and she was also free of involuntary mouth or body motions. She was discharged to Anoka State Hospital, where she stayed for two months. Thereafter she was seen at bimonthly intervals in our outpatient department; she was taking 100 mg. of nortriptyline hydrochloride, 6 mg. of haloperidol, and 2 mg. of biperiden per day. On January 12, her mental status examination was unremarkable.

Several observers recognized what seems to have been a typical example of the tardive dyskinesia syndrome, the waxing and waning of which was clearly but inversely related to the administration of antipsychotic medications.

Case 3. This 49-year-old man was a regular visitor to the outpatient department when I began to follow him in 1968.

In 1957 he was described as experiencing psychotic episodes. In 1965 he spent nine months at Anoka State Hospital, where he was diagnosed as having a schizophrenic reaction because of psychosis, agitation, and restlessness. Administration of phenothiazines resulted in a state of complete inactivity that responded to six ESTs. He was discharged on 300 mg. of thioridazine per day and was referred to our outpatient department, where he was seen at approximately three-month intervals over the following years. Motor restlessness was noted frequently. Eventually he lost his job because he was "too slow." His signature on a release of information dated January 3, 1968, was quite small and cramped.

When first seen by me on October 5, 1968, he was taking 400

TABLE 1
Summary of Case Reports

Item	Patient 1	Patient 2	Patient 3
Age	47	66	49
Sex	Female	Female	Male
Diagnosis	Paranoid schizophrenia	Involutional paranoid state	"Schizophrenic reaction"
Brain trauma	Bilateral prefrontal lobotomy in 1952; more than 76 ESTs	None	None
Previous neurological disease	None	None	Possible idiopathic parkinsonism
History of drug reduction	Yes	Yes	Yes
Demented	No	No	No
Mental status	Nonpsychotic	Psychotic	Nonpsychotic
Movement disorder	Trunk, extremities	Face, trunk, extremities	Face, trunk, extremities

mg. of thioridazine and 2 mg. of benztropine mesylate per day and demonstrated motor restlessness. On April 23, 1969, I noted very slight akathisia and I recommended that he reduce his thioridazine to 300 mg. per day. The benztropine mesylate was also discontinued. On July 16 I described him as follows: "would sit stiffly in his chair . . . at first no involuntary movements . . . later rocks to-and-fro . . . a fine tremor of his right thumb . . . on one occasion crosses both arms rather restlessly." My impression was that he had both akathisia and stiffness as motor side effects of the thioridazine. The patient, however, did not wish to decrease the thioridazine further. Three months later several observers felt he manifested definite parkinsonism. Again it was recommended that he lower his drug dosage since there was no evidence of a psychosis; he reluctantly agreed to decrease the thioridazine to 200 mg. per day.

On November 5, 1969, motor restlessness without noticeable movement of the tongue or lips continued to be present. For the first time the possibility was raised that, in view of the persistence of motor restlessness despite halving the dosage of thioridazine, we actually were dealing with tardive dyskinesia rather than akathisia. When this was explained to the patient and further dosage reduction suggested as a possible means of confirming the diagnosis, he pleasantly refused. Nonetheless, on January 28, 1970, there was a marked change in his appearance. Quite prominent constant champing of his mouth with frequent partial protrusion of the tongue was present. There was marked continuous rocking to-and-fro associated with twisting and writhing of the torso. He also kept crossing and uncrossing his arms, and he stood up once or twice during the interview. When this dramatic change was commented upon, the patient remarked that he had decided to reduce his thioridazine to 100 mg. per day after all. After some discussion, it was decided to increase the dose to 200 mg. per day.

Two weeks later he was observed to shift his weight from foot to foot while waiting for the interview. When seen he initially demonstrated slight protrusion of his tongue, then was quite relaxed and at ease for several minutes. Prominent oral motions and rocking motions were not seen at all during this time. Toward the end of the interview he began to manifest slight crossing and recrossing of his arms, as well as a slight rocking to-and-fro. I thought that he was much better. It was decided to continue the thoridazine at 200 mg. per day.

One month later he demonstrated throughout the interview continual motion of his tongue but did not protrude it. Rocking but not writhing of the torso was also present. Crossing and recrossing of his arms occurred every few minutes. His mental status was otherwise unchanged. He refused to increase the thioridazine dosage as recommended.

Although the diagnosis of schizophrenia was made at Anoka State Hospital, the patient manifested little evidence of schizophrenia and no evidence of psychosis while he was under my observation. On the other hand, he clearly manifested a combination of neurological findings, most of which were probably drug-induced, although idiopathic parkinsonism cannot be ruled out. Careful and repeated observations document the appearance of perioral phenomena, as well as a marked increase in a dyskinesia of the trunk and extremities after his phenothiazine load was reduced.

These involuntary motions were partially relieved by his resuming a higher daily dosage of thioridazine. Presumably they would have completely disappeared had the patient agreed to resume thioridazine at its former level.

DISCUSSION

Clinically these three patients are different in some respects from the typical patient in whom the syndrome is noted. Usually the affected person is a demented, elderly, chronic, institutionalized woman. None of the present subjects conform to this pattern, as table 1 indicates. Also, the duration of the abnormal movement before its recognition usually is unknown. Perhaps these differences, along with early identification of the syndrome, account for the "reversibility" described above when the drug loads were restored to their former levels. In one case the abnormal movements were completely abolished, while substantial improvement occurred in the other two.

Some of the controversy about tardive dyskinesia is probably due to two factors: 1) lack of recognition and 2) prematurely labeling it as a side effect.

Regarding lack of recognition, my own experience in working with chronic, often difficult inpatients (12) is that the behavioral repertoire of such patients becomes more impoverished the more they are hospitalized, whether or not the underlying disease process is "functional" or organic. The chronic patient simply cannot give you a history. Alertness and tenacious recording of ongoing behavior are required to distinguish among

TABLE 2
*Frequency of Dyskinesia in Three Experimental Groups**

Group	Number	Number of Subjects Demonstrating Tardive Dyskinesia		
		At Baseline	After Six Months of Experimental Treatment	After Return to Routine Treatment for Six Months
High dose	42	2	14	18
Low dose	49	3	9	10
Placebo	36	3	10	6

*Data from Crane (9).

simple agitation, learned "schizophrenic mannerisms," and psychotic disorganization and to separate these from choreoathetoid or dyskinetic motor movements. It is not unfair to say that the average chronic inpatient is probably not the beneficiary of this degree of clinical skill. It is conceivable that the untutored observer might mistake the dyskinetic movements for agitation or mannerisms or psychosis and treat them with phenothiazines, thus establishing a spurious correlation for the later investigator.

Several years ago, B.C. Schiele and I made a preliminary study[1] of the population and records of a state mental hospital to determine the incidence of the tardive dyskinesia syndrome and to get some idea of what role phenothiazines have in the genesis of these unusual movements. We found that the records of this institution were completely inadequate to the task of making a retrospective determination of the causal relationships among drugs, symptoms, and behavior. How many reports have been drawn from similarly incomplete records?

Ignorance of tardive dyskinesia also suggests that the results of "drug holiday" research studies may need to be reconsidered. If it is true that some cases of tardive dyskinesia are precipitated or exaggerated by withdrawal of neuroleptics, then the incidence of relapse may be overestimated in experimental versus control groups. This is a significant risk when one considers that the incidence of tardive dyskinesia when drugs are abruptly reduced or stopped ranges from 12–14 percent according to Crane (8, 11) to 30 percent in the experience of Hershon and associates (13). The latter are also concerned about the problem of nonrecognition.

A series of papers published by Crane and associates cannot be criticized for lack of clinical or, for that matter, research skills (8–11). Indeed, this work has been a major factor in the elucidation of tardive dyskinesia. One hesitates to comment upon such a distinguished body of work. I believe, however, that Crane's identification of tardive dyskinesia as a side effect of neuroleptic drugs has led to some difficulty in his interpreting the results of otherwise meticulous work (14).

This is reflected in his study of the incidence of tardive dyskinesia in two groups of subjects who were given high (80 mg.) or low (16 mg.) doses of trifluoperazine, as well as in a control (placebo) group (9). Observations were collected at baseline, after a six-month trial of the different regimens, and also after all groups had resumed routine treatment for six months. (This averaged out to about 300 mg. per person of chlorpromazine or its equivalent for all groups.) The results are summarized in table 2.

As would be expected if tardive dyskinesia is a typical neuroleptic side effect, a number of cases appeared after six months of treatment: 12 in the high-dose group and six in the low-dose group (10). However, Crane is at a loss to explain certain other findings—for example, the increase in dyskinesia among high-dose subjects after they had been returned to routine treatment for six months. One would expect a decrease, since the subjects in this group went from the equivalent of 1600 mg. per day of chlorpromazine (assuming trifluoperazine is 20 times as potent as chlorpromazine) to about 300 mg. per day of chlorpromazine or its equivalent. Yet at least four new cases appeared. The placebo group is also puzzling, but especially relevant in view of the case reports above, since at least seven new cases developed after the subjects were switched to a placebo; some of these cases disappeared when routine treatment was resumed. Crane noted that his data are difficult to interpret rationally.

A subsequent study by Crane and Naranjo produced less ambiguous results (11). Using factor-analytic techniques, they isolated three clusters of involuntary motor movements in patients treated with phenothiazines. One cluster did not correspond to any recognized neurological entity. A second corresponded to pseudo-parkinsonism, while the third closely resembled tardive dyskinesia. They then studied the effects of phenothiazine withdrawal in a sample of patients over a six-month interval. The pseudo-parkinsonism cluster decreased in magnitude but the tardive dyskinesia cluster increased. No significant changes were noted in a control group that was treated routinely for six months. Among their conclusions was that these results supported previous observations that the reduction or removal of neuroleptics may uncover or magnify tardive dyskinesia.

Hershon and associates, employing the same research methodology, reached the same conclusions (13). Both groups of workers avoided defining this paradoxical find-

[1] This study was never published but is summarized by Ettinger and Curran (5).

ing as a side-effect relationship:

Yet Crane recently stated without qualification that tardive dyskinesia is a side effect of phenothiazine treatment (14). My belief is that such an interpretation of the evidence is not only premature but misleading as well. It might lead the physician to conclude that phenothiazines should not be administered or should be withdrawn in cases of tardive dyskinesia. This would be unfortunate since, as demonstrated above, *withdrawing phenothiazines aggravates the syndrome.* Moreover, such a viewpoint neglects several reports from England that the syndrome can be reversed with thiopropazate, a phenothiazine structurally similar to chlorpromazine (15–17).[2]

It seems to me that the evidence is not sufficient to establish tardive dyskinesia as a side effect of neuroleptics. That a drug can produce a syndrome both upon administration and withdrawal seems absurd, but the evidence indicates this is so. Perhaps as the contribution of brain damage to the genesis of tardive dyskinesia is defined this contradiction will be resolved. It should be noted that the recent systematic studies of Crane and Naranjo (11) and Hershon and associates (13) were carried out in selected populations that were free of organic brain damage. Perhaps studying this variable, which is widely recognized to be important in the production of tardive dyskinesia, will provide more intellectually satisfying answers.

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[2] I have tried thiopropazate in two other cases of tardive dyskinesia for up to three months and have found that this is so. Unfortunately, the drug is no longer marketed in this country.

Language and Thought Content in Acute Psychosis

BY FRANK E. REILLY, M.D., MARTIN HARROW, PH.D., AND GARY J. TUCKER, M.D.

Twenty-three acute schizophrenic inpatients were given a standardized 15-minute "free verbalization" interview during the acute phase and again during partial recovery. During the acute phase, patients tended to get lost in a vivid, overwhelming flood of details, whereas later they took more distance and were not as overinvolved, even when discussing the same subjects. Over time there was a shift to future concerns and a renewed interest in interpersonal relationships and responsibilities. Patients became more organized and coherent over time.

THE STUDY OF mental illness has become extremely sophisticated in almost every aspect but, as elegant as the new techniques have become, one of the most perplexing and fascinating elements of mental illness remains the free verbalizations of the acutely psychotic patient. This type of clinical material was used most extensively by Bleuler (1) and other early clinicians, and it was found fruitful in many formulations about the nature of schizophrenic disorders. While verbal material such as this has been reported for individual patients (2), and their thinking has been explored with specific tests, there have been surprisingly few systematic studies of the changes in the verbal behavior of acutely psychotic patients at specific time points in their illness. The last taped study of looseness of associations of the speech of schizophrenics in a large sample was done 19 years ago using a group of *chronic* schizophrenics before the phenothiazine era (3). Bleuler's examples of schizophrenic speech, absorbing as they are, were also taken from a chronic population.

The present investigation represents an attempt to systematically study and analyze the free speech of a sample of *acute* schizophrenics at two time periods: 1) on admission to the hospital or at the height of the acute episode and 2) seven weeks after hospital admission (partial remission). It is designed to answer the following questions: 1) Are there any characteristic patterns in the free verbalizations of the acute schizophrenic patient at the height of his disorder? 2) Does the verbal content of the acute psychotic patient change with partial recovery?

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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METHOD

Subjects and Setting

The subjects were 23 acute schizophrenic patients interviewed during their first and seventh weeks of admission to the psychiatric inpatient division of Yale-New Haven Hospital (4, 5). The sample consisted of young acute schizophrenics who had not been chronically hospitalized. One patient from among the original 23 was mute during both interviews and one other patient required so much prodding to speak that she could only be scored on some of the variables. Therefore the number for the final results varied from 21 to 22, depending on the variable rated. The median age of the sample was 20 years.

Procedure

All patients were given a standardized 15-minute interview during their first (time period 1) and seventh (time period 2) weeks of hospitalization by an experienced psychiatrist. To allow systematic evaluation of the verbal responses, all patients were given the same set of instructions, as follows:

> We're interested in how people who come to the ward feel about certain things and how they express themselves about various matters. We're interested in talking to you about it now, and then once again before you leave. So we'd like to spend about 15 minutes with you now, and once again before you leave the hospital, and ask you a few questions. We routinely tape record this so that I'm not sitting here busily jotting down notes while we're talking. We'd like you to talk for about seven minutes about anything you like other than mental health or the events leading up to your hospitalization—we'll talk about that later. So talk about anything—it could be about things at home with your family, or work, or school, or books, or things you like to do or see. . .anything.

The seven-minute monologue by the patient on a nonmental-health topic was followed by a seven-minute monologue by the patient on a mental health topic, using the following instructions: "Now we'd like you to speak for about seven minutes about the events leading up to your hospitalization."

All patients were directed to speak for seven minutes on each topic, with half of the patients being assigned the mental health question first. After the introduction, the interviewer only spoke when he found it necessary to encourage the patient to continue talking, and his comments were limited to that goal (e.g., "Could you please go on," or "Could you say more," etc.). All interviews were taped, transcribed afterward, and then rated inde-

pendently by two experienced clinicians on 13 variables. These 13 variables, which were rated on five-point scales, were designed to assess changes over time in the significance of recent life events for the patients, changes in their focus of attention, and changes in their organizational ability. Three of these 13 variables were later eliminated due to difficulty in obtaining satisfactory reliability. Satisfactory interrater reliability was obtained on the other ten variables, and these variables are listed in tables 1, 2, and 3.

RESULTS

The Schizophrenic Experience

Bowers (6) and others have written in a more global fashion about the course of an acute schizophrenic episode; among other things they emphasized the sense of heightened awareness these patients experience early in the course of their psychosis. As part of a larger ongoing research project on schizophrenia (7–10), we have begun to document in a more formal and systematic way the ongoing course of the psychotic episode by studying the patients' own recorded verbalizations.

Three general trends were noted in the material and examined in detail: 1) the changing significance of recent life events for the patient, i.e., how patients describe their psychosis initially and how they come to view it six to eight weeks later; particular emphasis was placed on how intensely involved and overinvolved the patients were in their psychosis, and how they came to make sense of their psychosis; 2) the changing focus of attention from past to future: over this same time period, although much of the original content remains, there is a change in the way it is viewed, and considerable new content emerges that is concerned less exclusively with the self and that focuses on interpersonal and future concerns; and 3) an increased ability to organize communication: there is a growing capacity for following directions and for more logical, coherent, organized verbalizations.

Since this investigation is based on a sample of 23 acutely ill schizophrenics studied over two time periods during the course of their illness, five patients are quoted rather extensively. Although the focus is on verbalizations from these five acute schizophrenics, the data from the remaining patients were also analyzed and are presented to provide detailed information on the generality of each trend reported.

The Changing Significance of Recent Life Events

When the patients described the events leading up to their hospitalization, 82 percent (18 of the 22) became lost in an overwhelming flood of details. The early excerpts consisted of *vivid, detailed* descriptions, *lists of events*, and near-catalogues. The patients at this time were caught up and involved in their experience and took little distance from it. They were unable to sort out details; there was no hierarchy of importance. After partial recovery (at time period 2), in contrast, 15 of the patients (83 percent) who were overinvolved at time period 1 had taken considerable distance from their experience and talked of it in a more conventional, socially acceptable, condensed form.

In the following, a young graduate student, when asked what events led up to his hospitalization, talks at considerable length and with great intensity of a series of problems and decisions that gradually overwhelmed him. He constantly gets drawn up into his delusional system of a model that will predict the future, including his own death:

> Well, I was working on. . .I had tried to predict things, and I. . .I do a lot of simulation work. . .with animal populations. . . .And I was trying to. . .get a model based on genetics that would predict what harvest schemes we could use, and, would harvest. . .for harvesting ducks. . .based on the genes. . .the genotypes that they had. So I got working on that. And I'd worked on it all week until Friday. . .Friday night, till 11 o'clock, when I went to a party, and I had a few beers. Then. . .then I started working on this thing the next day some more, and I just went wild with it and started getting away from ducks and into people. And I planned to. . .I put. . .I kept putting myself. . . they kept saying that. . . that I'd reached a point of instability in which. . .I couldn't. . .there weren't. . .I couldn't figure out a way I could get beyond this point of instability. Uh, I. . .I would put myself into the model. . .trying to predict whether I should be going on. . .to a Ph.D. next year. . .at the University of _____. . .I kept wondering whether I should get married. . .whether I should settle down in _____. . .just what I should do. I got. . .I got so many alternatives. . .uh. . .decisions that I just went all out with it. And, uh, then I figured that. . .well, I predicted that I was going to die. (Sentence omitted.) Uh, so that I thought that this model was right in saying that the world was coming to an end, and it was my feeling that the world was coming to an end. But the model said I shouldn't tell anybody about the model, that that would just lead to chaos.

Six weeks later he has taken a good deal of distance from his delusions. When he does talk about them, he uses borrowed *clinical terminology* and psychiatric jargon, and he is much more general, much less concrete, than previously. The content is to some extent similar, but he makes the same content much less immediate for himself; actual details are less significant and important:

> Uh. . .well, I'd been working on a paper. . .uh, working pretty hard on it. . . and I got so involved in it that I lost a sense of. . .uh. . .what was real and what wasn't real. . .and I started having all kinds of racing thoughts and hallucinations, seeing things and hearing things. . .and. . .uh. . .(five-second pause) . . .it's like a bad experience, it seems that your mind seems to put it out of your mind . . . your mind seems to put it away where you can't get at it . . . because it's hard for me now to think of. . .I can think of some things. But it's hard for me to draw on how my emotions were at that time.

Later on in the interview he himself explains the distancing maneuvers he is going through. He is painfully aware of the *implications of the material*, i.e., that he was recently psychotic, is just recovering from that psychosis, and is not certain whether he might not be overwhelmed

TABLE 1
Changing Significance of Recent Life Events for Patients

Variable	More Pathology at Time Period 2	Same Level of Pathology at Time Period 2	Less Pathology at Time Period 2	Significant Difference
Overdetailed verbalizations	3	4	15	$p<.01$
Vividness of verbalizations	3	2	17	$p<.001$
Delusional verbalizations	0	8	14	$p<.001$
Overall significance of events	1	3	18	$p<.001$

and psychotic again. It is clear that the material has not been repressed or forgotten but that he is attempting to *reinterpret* it. He himself would like the entire experience to be much less vivid:

Uh...I have trouble getting distance from my problems, I can't seem to get them out of my head. I find that even now it's really hard for me to handle problems. I really have to really concentrate and say stop, you know, back off. That's one thing I picked up here (in the hospital). Uh...it's kind of a syndrome I get into—I get thinking about things and I don't get to sleep at night—I wake up early in the morning...I get completely run down...I just hope that I learned how to back off.

Another young college student, also schizophrenic, when asked shortly after admission what had led up to his hospitalization, replies in great detail, aimlessly listing a number of elements with no imposed organization and with no conviction. For instance, when he describes the theft of a car, he is *caught up and involved* in his story; he supplies a flood of details surrounding the episode, which is especially interesting in its autistic quality, in his blending internal belief with external reality:

For one—uh, I accidentally stole an automobile 'cause I was so high on drugs, and, uh, not the night before, but it was just an accumulation of all the days put together that, you know, your brain can only take so much. So, I had...I was looking for something...I always did want a fast car in my life...it's uh...since I was born that's all I thought about is having my own car...registered in my own name...and have the title in my own name...etc. So, after buying a few cars, I found out that I really wanted a fast car. So what I did was I saw this car...which happened to be...I thought it was Jimi Hendrix's car, you know, he's dead, because he had driven a Mustang while he stayed on Maui—and he had a pretty powerful engine in it—and I looked at this car and I looked around and I couldn't see any people when I first approached this car, while being high on drugs, everything looked kind of...sort of abandoned, and I looked at the car and it was in perfect shape, the keys were in it, it looked like it was just ready for me to go drive off. I got into the thing and I drove off! Thinking that it was Jimi Hendrix's ex-car, you know, I thought the machine was his—it could have been very well his car because it was such a popular car and I had a lot of time in it...I had a lot of good fun in it...I had so much good fun that I ended up with about ten policemen on my back—after driving the car. (Laughter.)

In the above quotation he almost relives the experience, as he builds up false hypotheses from chance detail. When asked the same question toward the end of his hospitalization, he begins his answer by stating that he was upset over the accidental death of an old girl friend, a relatively unlikely reason, but one that is somewhat more conventional and acceptable to him, since it provides a *causal*, much more *socially acceptable, integrated* explanation for his behavior. His mention of the episode with the car is briefer, shows *increased distance*, and has been pared of his delusional belief that it belonged to a famous, deceased pop singer. The *heightened attention* to details is gone; individual details are much less significant and important:

And, uh, before I knew it, uh, I had gotten an automobile...I had stolen an automobile with all intentions of returning it...but, uh, I found out that I was so screwed up on drugs that...I would *never* do anything like that—steal a car! But at the time it didn't come to me—I was too stoned to realize it—and before I knew it there I am on the road racing a Mustang up and down the street and then having ten policemen come after me.

Table 1 presents a more detailed summary of the results on the changing significance of recent life events for the patients during partial recovery. The change scores on each of the four variables were found to be significant, using the individual change scores and calculating t tests of the change scores. Most of the patients who did not change in the direction of less psychopathology at time period 2 were among the few patients who did not show difficulty in this area at time period 1.

The Changing Focus of Attention

During the height of the acute psychosis, 18 of the 22 patients (82 percent) were self-immersed and extremely preoccupied with themselves. Fifteen of the 22 (68 percent) were preoccupied with the past and with the aggravating events or people they saw as leading to their hospitalization. As a group these patients, who were initially so self-centered and past-oriented at time period 1, were much more future-oriented at time period 2 ($p < .001$). Table 2 presents the detailed data on the change scores at time period 2 for each of the four variables in this area, again using t tests of the change scores.

Note the egocentricity demonstrated in the following excerpt from a young housewife who had had recurrent psychotic episodes triggered by marital difficulties. When she is asked, shortly after admission, to talk about any-

TABLE 2
Patients' Changing Focus of Attention

Variable	Increased at Time Period 2	Same at Time Period 2	Decreased at Time Period 2	Significant Difference
Concern with past	2	4	16	$p<.001$
Concern with present	7	8	7	n.s.
Concern with future	17	5	0	$p<.001$
Self-immersion	2	3	17	$p<.001$

thing she chooses, she can talk only about her husband and herself:

Wow. . .uh, right now I see that, uh. . .my husband does want a divorce. Now, he doesn't want to be married now. And, uh, he still considers me as a baby, which I'm not. And, uh, I got the feeling last night that he has someone else to go to besides me, and I know he's concerned, he's very concerned about my being here. . .he proved that in family meeting, he's very concerned. And, uh, I was glad that he was. And, uh, just to him. . .going to a psychiatrist is hogwash. . .a lot of baloney. . .'cause he has a brother who believes psychiatrists are just crazy.

In striking contrast to this, at the time of discharge, when asked to speak about anything she chooses, she no longer talks broodingly about her husband, but about her children, her brothers, her medication, and concerns she has in the present and for the *future*. There is a marked *change in her preoccupation*:

O.K. I enjoy being with my children and we really had a good weekend—we took them to the carnival, I bought them books, and I bought them . . . uh . . . they got new dresses . . . Christine has a new dress for school . . . getting their clothes organized, and . . . uh . . . (interruption) . . . getting their clothes organized and . . . uh . . . I enjoy being with the children most of all. That's my main . . . idea . . . uh . . . just being with them . . . it makes me happy . . . it makes them happy. And . . . uh . . . getting support from my brothers that I never got before . . . which I'm getting now. And . . . uh . . . I'm worried about . . . about taking medication . . . you know, uh . . . maybe for the rest of my life.

Fittingly, at the close of the interview at time period 1, she is still talking about her husband, about the *past*:

We've known each other since I was 16 . . . 18 . . . I was 16 . . . he was 18. We never split up, when we were going steady. We fought like cats and dogs, but never split up. But, maybe for two weeks—that's going steady. And when we were married, the same thing . . . well, he had his problems, too. He lost his mother . . . his father two days after we got married . . . he lost his mother two years ago. And this has, you know, built up.

In contrast again, at the close of the interview at time period 2, she is working at putting the self-destructive relationship behind her and is concerned about her behavior in the *future:*

And I think now I'll be better off without him, 'cause every time I see him I get upset. And I don't want to feel that way . . . the less I see of him, I mean, the better off I am.

Although we had originally hypothesized that at time period 2 the patients would also become less present-oriented as they entered into partial recovery, the data in table 2 did not support this formulation, despite the significant results in the other areas studied.

Increased Ability to Organize Communications

As improvement occurred, the tendency for the patient to organize his thoughts in a more logically coherent fashion became increasingly apparent. This was evident throughout the series. An increasing organizational ability was apparent, an increasing ability *to follow the task* and keep to a set. Patients showed more capacity to structure their thoughts along time dimensions, and there was a decrease in abrupt shifts in tense. Preliminary analysis shows that certain types of looseness of associations are moderately frequent during the acute stage, but tend to diminish as the patient begins to recover. Clear blocking was not frequent for these *acute* schizophrenics, even at the height of the acute psychotic break.

Initially, many of the patients showed considerable disorganization. Eight of the patients were unable to follow directions precisely, in terms of talking about the topics assigned during the instructions by the interviewer. In addition, it was difficult to follow 16 of the 22 patients' train of thought during at least part of the interview. By time period 2, there was marked improvement, and this improvement is summarized in table 3. For example, at time period 1 a young schizophrenic man talked of what had happened to him prior to hospitalization. Some of his usage is idiosyncratic. There are abrupt time shifts. He appears confused at times. There are sudden shifts in thought and a lack of logical connection of ideas. It is difficult to follow his train of thought:

O.K. Briefly, there's a rumor that got me here. Here I was—my mind finally got together after being introverted for nine months. I was in jail. I got out a 25-day sentence for penicillin without a prescription, phenobarbital—I had two phenobarbitals—I didn't even know what they were. Asthma, Benadryl, Bayer aspirin—so they booked me and I got 30 days in Erie County Penitentiary and when I first went in . . . first went in and I dug every minute of it . . . like I walked in with the attitude—here's my new home—far out—I never lived in a house this big, you know. So they said would I check my pack in? Check it in, went in. I wrote on the I beam facing in—you're not

allowed to write on it—I wrote "Home is where you're at"—which I believe in strongly. And O.K. A couple of weeks ago my head finally snapped together again to where it used to be 'cause I'd gone to jail like I was an extrovert—I'd just become extrovert after being an introvert all my life. And I was digging the extrovert. And I went to jail and after two weeks I couldn't handle it—and I went pppfffttt!!!—and I was 16 years old mentally and physically when I walked out of the place. I had to learn how to talk to girls again without being up-tight—the whole adolescence trip—and here I was a day later in college. And I'd taken—in the fall—or in the spring—a leave of absence—I had enough homework for nine months and I had to hit the books so I had no time to relax, I was still up-tight from jail. (Note: marked confusion and abrupt time shift.) And the end of the first semester I was 17 years old and all my friends—I couldn't relate to anybody—I mean how could a 16-year-old relate to a college scene? It was very hard and I was so severely alienated—and I was in suicide alley all the way—like I could just sit down and cry for hours each day 'cause I couldn't get my head back to where it used to be. I was so boned out. I was paranoid of everybody, I was scared to death of people, I was in jail and I had some real nasty experiences—I didn't get raped, but my head got fucked over just the same.

Six weeks later, he is much more organized and not so flooded with details. This improvement is much more impressive in view of the fact that the day prior to the second taping he had been acutely agitated:

(Chuckle)... (clears throat)—(pause) Well, I'll start way back in jail—I had an experience where I ended up in jail for 25 days and I walked out I was mentally like a 15-year-old... I was embarrassed at girls... I was introverted... I was, you know, really depressed... and wanted to commit suicide. Like I'd try to do homework and I'd sit there and just cry 'cause I couldn't do it. Total alienation and frustration which led to my mother bringing me home in the middle of the week to calm down which helped a great deal and things looked bad and the future looked bad—and I was scared to death of what was happening to me.

Even more striking are these final excerpts from a young schizophrenic girl. There is great pressure of speech, almost no logical connection between sentences, and usage that is idiosyncratic. The topic switches at breakneck speed, and she is confused throughout.

Well... I do like to cook sometimes.... It seems like I'm not cooperative with anybody anymore. It seems like everybody runs on one track and one's on another; it seems to me like everybody's running around. I think I'm making myself this nervous because I eat too much. I don't know how much to eat or anything, and that's just it—I don't know what I want to do all day long and I have to ask people and then one girl—well, they keep switching back and forth—like one will be on Monitor and one will be a buddy or something—I'm still confused about that—and... going out for a walk yesterday—I wanted to get out—but it was kind of cold outside, and I... um... a lot of times I worry about my parents—if they've gotten home or not or if they've been tied up somewhere. And... I don't feel like I'm crying to people—the way I act I feel like I'm kind of bold, and hurting them. And, uh... that's just it—I don't know what I want to do. I'm all confused. And, uh... I'll talk to one person about one thing—and I'll talk to another person about something else—and maybe I'll get them all confused that way. And, uh... like I have no sense of direction—somebody's got to lead me by the hand.

A month and a half later, though still showing some signs of psychosis, she can at least hold to one topic for a period of time. She does not switch subjects rapidly, and the passage is coherent. As noted above, she too is much more future-oriented:

I don't know about school yet, and Dr. _____ was ordering a tutor—I don't know if she's going to come or not. It would take up some of my time here. And, uh, I'm not ready to go back to school, I don't think. If I did I'd just take up one or two subjects. (Sentence omitted.) I'm getting a little used to this place now. It's not... it's not as scary as it used to be... when I first came in I was really tense—now I feel like I'm more relaxed. And I think I'm getting used to it now. Tomorrow... well, I'll probably go out for a buddy walk—'cause I got on the buddy system today... I feel very good about that. And I'm anxious to get home too. I want to see my friends at church, and, you know, different people like that. 'Cause I miss them a lot. And, uh... I don't know... I just feel very happy today. Probably 'cause I got on the buddy system. It's... I'm just happy.

A more quantitative analysis of the interviews is being conducted now. At this point, however, it is valuable to note the striking changes in the quality of the patients' verbalizations as the psychotic picture becomes less flagrant. For instance, preliminary analysis indicated that looseness of associations was significantly decreased by time period 2. It is also worthwhile to point out that striking examples of blocking, such as this one from time period 1—"I thought I could settle down to a life with my girl friend—I feel like, uh,—I, uh (pause)—I urinate a lot, especially when I'm nervous..."—are never prominent even at time period 1 and are almost entirely absent by time period 2.

TABLE 3
Ability of Patients to Organize Their Communications

Variable	More Pathology at Time Period 2	Same Level of Pathology at Time Period 2	Less Pathology at Time Period 2	Significant Difference
Unable to follow directions	0	12	9	$p<.01$
Unable to follow train of thought	2	3	16	$p<.001$

SUMMARY AND IMPLICATIONS

In conclusion, a number of clear trends emerged from the patients' verbal material. During the height of his psychosis, the schizophrenic becomes lost in an overwhelming flood of details. The vivid, detailed descriptions formally document the patient's loss of distance and his intense overinvolvement in his experience (11) and indicate a probable heightened awareness.

After partial remission, some change in content is consistently documented. In our data many of the incidents described at excessive length at time period 1 are referred to at time period 2, but references to them are briefer, more socially conventional, detached, and concise; specific details and events are remarkably less significant and prominent. This material, then, would support theories that in acute psychosis there is an impaired ability to respond selectively to the external world and would also indicate that this ability to respond selectively and to take distance are rapidly regained as the acute psychosis subsides. After remission there is also a significant content shift to future concerns. This change in time orientation may be part of the natural course of the illness, or psychotherapy and the treatment values of the milieu may orient patients to think about their future as they emerge from their psychosis. Moreover, there is a decrease in preoccupation with self and there is a renewed interest in interpersonal relationships and responsibilities.

Finally, in regard to the patterns of speech and the quality of thought, our data would support formulations about the presence of some looseness of associations during the acute schizophrenic episode. However, preliminary analysis shows that the looseness tends to diminish as the patient begins to recover. Moreover, our preliminary data would indicate that blocking and neologisms, long considered essential phenomena of schizophrenic thinking, are in reality not frequent even at the height of the *acute* schizophrenic episode. It is also of marked interest that in our sample there does not appear to be greater disorganization in schizophrenic speech when the patient is faced with what could be considered a stressful, rather than a nonstressful, topic to discuss.

The data suggest that in an active treatment setting at least some of the flagrant psychotic features present in the acute schizophrenic patient begin to diminish (or disappear) during a relatively short recovery period.

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DISCUSSION

ALFRED B. LEWIS, JR., M.D. (New York, N.Y.)—In studying changes in the thought content of acute schizophrenics, the authors have come up with three general conclusions. Partial recovery from the acute episode is associated with: 1) greater "distance" from recent life events, 2) a change in the focus of attention from recent past to future and from the self to other people, and 3) improved organization of communication.

This paper raises several interesting issues related to an understanding of schizophrenia, but I will confine my comments to two points: 1) the concept of ego-boundary breakdown in schizophrenia and 2) the implications of these findings for treatment.

The patients described by the authors can be viewed as suffering severe ego-boundary pathology. These patients cannot keep separate what originates from within and what originates from the environment. The result may be described in terms of "loss of distance," "overinvolvement," or, in extreme cases, a tendency to "fuse" with the environment and to lose the ability to delineate the self from its surroundings. The gradual reestablishment of "distance" from recent life events during the recovery process may also be viewed as a reestablishment of the integrity of the ego boundary.

An interesting question is: What is the relationship of ego-boundary diffusion to the breakdown of repression that is alleged to occur in schizophrenic disorganization? Just as there is a theoretical boundary between the self and the outside, there is also a theoretical boundary between conscious awareness and the unconscious—a kind of "internal ego boundary." The permeability of this boundary permits an upsurge of impulse and fantasy from the unconscious that some clinicians regard as characteristic of schizophrenic thinking. Do both the external and internal ego boundaries break down in acute schizophrenia? Or does one or the other break down selectively? And if the latter, is the site of the boundary breakdown related to the acuteness of the process, the subtype of schizophrenia that develops, or the preexisting personality structure?

It is possible, for example, that acute undifferentiated schizophrenics, who suffer clinically from ego-boundary breakdown (the kind described by the authors), are in actuality suffering from an inability to screen relevant from irrelevant incoming information. The development of chronicity, and perhaps the differentiation into one of the subtypes of schizophrenia, may represent an effort to cope with a sense of being overwhelmed by this information, either by selectively attending largely to internal stimuli such as might occur in catatonic withdrawl or by selectively attending to a narrowed area of external stimuli, such as might occur in the formation of paranoid delusions.

For example, patients with premorbid hysterical personalities, who tend to be very suggestible, may be more predisposed to external ego-boundary breakdown, while those with premorbid obsessional personalities, who have relatively weak repression to begin with, may be more predisposed to internal boundary breakdown.

My second point concerns the implications of this work for the treatment of acute schizophrenia. If the process of recovery seems to be characterized by the development of increasing distance from threatening life events and experiences, and by the focusing of greater attention on other people and on the future, then the acute schizophrenic should probably be discouraged from talking about the recent past with which he is so preoccupied. Psychotherapy sessions and interaction with staff members should probably be handled in a structured way, so as to minimize the loosening of the thought processes. Persistent efforts should be made to focus the patient's attention on the future, and on other people in the present, in order to encourage the development of distance.

These may seem like relatively simple-minded ideas, but in many active treatment units the patient is exposed from the beginning of his hospitalization to the same kind of stimuli that he has difficulty distancing himself from. For example, he may be permitted visits from family members and friends who are intimately involved in his recent life experiences. He may be subject to detailed questioning by his therapist about the events of his present illness. He may be encouraged to talk about it by staff members or other patients in group therapy or community meetings. Such procedures might tend to slow down the distancing that seems to be such an important part of the recovery process in acute schizophrenia.

As a further illustration of this point, the next time I see an acute undifferentiated schizophrenic on my inpatient unit, I am going to advise the resident and the nurses to talk to him about anything *but* the events of his present illness—remote past, future, other people, even the weather—in an effort to accelerate this process of distancing that seems to be associated with recovery.

Alcoholics' Patterns of Controlled Drinking

BY EDWARD GOTTHEIL, M.D., PH.D., ARTHUR I. ALTERMAN, PH.D., THOMAS E. SKOLODA, M.A., AND BRENDAN F. MURPHY, M.S.W.

Groups of seven to ten volunteer alcoholic patients were studied and treated on a closed ward where alcohol was available. Of 66 patients who completed the program, 44 percent did not drink at any time, 33 percent drank throughout the drinking phase of the program, and 23 percent began drinking and then stopped. The results of this study question the assumption that drinking by alcoholics necessarily results in irresistible craving, more drinking, and loss of control. The authors point out the need for research into the circumstances and maneuvers that influence resistance to drinking.

A NUMBER OF THEORIES about why people drink excessively were recently grouped into various lay and professional models of alcoholism by Siegler and his coworkers (1). In what they described as a "new medical model," alcoholism was defined as a progressive and often fatal disease that was possibly hereditary and that occurred in individuals with a particular body chemistry. The hypothesis of an organic predisposition to alcoholism is not uncommon (2–7) and is compatible with the conception that an alcoholic can never drink in a controlled manner. From this point of view, the first drink a predisposed individual takes inevitably results in irresistible "craving," more drinking, and "loss of control." However, some recent findings are bringing these concepts into question.

Merry (8) and Paredes and associates (9) found that a single drink did not necessarily trigger physiological craving, loss of control, or undesirable behavior in their patients. Several studies have indicated that some alcoholics could return to moderate and controlled drinking (10–13). Mello and Mendelson (14) reviewed the work on experimentally induced intoxication and concluded that alcoholic subjects demonstrated more control over their drinking behavior than was compatible with a concept of craving. For example, their subjects did not drink all of the alcohol available to them in spontaneous drinking situations. Periods of heavier drinking alternated with periods of lighter drinking and even brief periods of abstinence. Under operant conditions they earned less alcohol when the amount of work required for a given amount of alcohol was increased, even though it was still easily within their capacity to earn more. These last observations were generally corroborated by Nathan and associates (15). Cohen and her associates (16) found that by increasing the amount of monetary reinforcement they could purchase single days of abstinence from each of four patients even when they scheduled a delay in payment or administered a priming dose of alcohol.

In our Fixed Interval Drinking Decisions (FIDD) program (17–19), alcoholic patients were studied and treated on a closed ward; alcohol was available and they could elect to drink or not drink at predetermined intervals. Without programmed rewards or punishments for drinking or abstaining, eight of 25 patients were found to drink throughout the four drinking weeks of the program, eight began drinking but stopped, and nine never drank at all in the presence of available alcohol and other drinking patients. Nevertheless, many workers in the field believe that alcoholism is characterized by craving and loss of control. Marconi and his co-workers (20, 21), on the basis of their neurophysiopathogenic theory and experimental results, described the following three forms of physical dependence in which patients experienced a state of distress and an overpowering desire to consume more ethanol: 1) a primary physical dependence without previous ingestion of ethanol, 2) an inability to stop after ingesting a small quantity of alcohol, and 3) an inability to abstain after continuous drinking.

This paper includes a description of the drinking patterns of 66 patients who have now completed the FIDD program. For those patients who stopped drinking during the program, measures of self-esteem, sleep disturbance, socialization, and discomfort obtained before and after they stopped drinking were compared. In addition, the test scores of these "stoppers" were compared with their drinking behavior after a six-month follow-up period.

METHOD

The development, rationale, criteria for patient selec-

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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The authors wish to thank Otto Schaefer, M.D., Director, and Floyd S. Cornelison, Jr., M.D., Chairman of the Dean's Committee, Coatesville VA Hospital, for their administrative support and guidance; Harold D. Crawford, for his assistance in collecting the data; and the many other members of the hospital staff and research committee, for their cooperation and contributions to the day-to-day operation of the program.

tion, therapeutic program, and some research findings of the Fixed Interval Drinking Decisions program have been described in earlier papers (17–19). Briefly, groups of seven to ten volunteer male alcoholic patients between the ages of 25 and 55, without psychosis or serious medical or neurological disease, were studied and treated on a closed ward in the presence of alcohol.

The program began with a *predrinking week* during which alcohol was not available. A varied multidisciplinary treatment program was initiated and baseline studies were performed. This was followed by a four-week *FIDD phase* in which the patients could elect to drink zero, one, or two ounces of ethyl alcohol, straight or with water, each hour on the hour from 9:00 a.m. to 9:00 p.m., Monday through Friday. If the patient decided that he wanted a drink, he came to the nursing station at the appointed time, received his alcohol, and drank it there. The time and amount were recorded by the nursing personnel. This schedule provided 13 decision points daily and a maximum intake of 26 ounces. The staff attempted to maintain a neutral—neither encouraging nor discouraging—attitude toward drinking while helping the patient think about his problems and drinking decisions. Psychotropic medication was not prescribed. A *post-drinking week* completed the program cycle. Alcohol was not available, the initial baseline studies were repeated, and discharge, transfer, or other posttreatment plans were developed and implemented.

Test Variables

Situational discomfort. A 17-item adjective checklist (19) was administered three times each day throughout the six weeks of the program. The patients indicated the extent to which they felt nervous, gloomy, angry, fearful, etc., on five-point scales. Average daily and weekly scores were calculated.

Sleep disturbance. Daily responses were obtained to a six-item sleep inventory. The inventory included such questions as "Did you have a restful night's sleep?" and "How many times did you wake up last night?"

Self-esteem. Once a week the patients were asked to rate themselves according to whether they were more like one or the other of 16 pairs of contrasting adjectives (22, 23). The ratings were made on seven-point bipolar scales, with a higher total score indicating a more favorable self-description.

Socialization. Observations of socialization behavior during waking hours were made and recorded by nursing attendants at half-hour intervals. A withdrawal score was obtained by counting the number of times a day that an individual was checked as being alone in his room and a socialization score by counting the number of times an individual was checked as actively engaged in socializing (group discussion, playing pool, etc.).

Follow-up questionnaire. Six months after leaving the program, patients were sent a questionnaire that included such items as whether and when they took their first drink, whether and when they first became intoxicated, and the number of days on which they drank and became intoxicated during the past month. They were also asked to compare how they felt and how much they were drinking before and after the program and the extent to which they had been helped. If no response was received, telephone contact was attempted. Patients whose responses to the questionnaire items indicated that they were: 1) feeling better, 2) drinking less, 3) had been helped, and 4) had not been intoxicated more than once during the past 30 days were considered to be improved.

TABLE 1
Consumption of Alcohol by "Stoppers"

Subject	Number of Drinking Days	Total Ounces Consumed	Percentage of Days on Which Subject Drank	Average Intake Per Drinking Day (Ounces)
A.	19	319	68	24.5
B.	19	170	47	18.9
C.	20	169	75	11.3
D.	19	166	37	23.7
E.	19	162	37	23.1
F.	19	124	26	24.8
G.	19	114	53	11.4
H.	19	78	32	13.0
I.	19	66	58	6.0
J.	19	52	47	5.8
K.	20	22	5	22.0
L.	19	18	42	2.3
M.	20	7	10	3.5
N.	19	3	5	3.0
O.	19	2	5	2.0

RESULTS

At present, 66 of 76 patients have completed the FIDD program. Six patients were found to have disqualifying illnesses that had not been detected or established during the initial screening examinations. One patient became hostile, assaulted another patient, and was transferred out of the program. Three patients withdrew from the program. Of the remaining 66 patients, 29 (44 percent) did not drink at all, 22 (33 percent) drank throughout the drinking phase of the program, and 15 (23 percent) began drinking and then stopped.

"Stoppers" were defined as individuals who had had some alcohol at some time during the first three drinking weeks but had not taken a single drink during the fourth drinking week of the program. They included 12 white and three black patients, with a mean age of 40.9 years and a mean educational level of 10.1 years. Only three of the 15 were married and living with their wives. They described themselves as having been drinking heavily for an average of 13.0 years. Blackouts had been experienced by 12 of the patients, "the shakes" by 11, delirium tremens by four, and convulsions by three; nine had been previously hospitalized for alcoholism. During the past year, ten had missed three or more months of work. The total amount of alcohol they consumed during the program, the percentage of possible drinking days on which they

TABLE 2
Consumption of Alcohol by Continuing Drinkers

Subject	Number of Drinking Days	Total Ounces Consumed	Percentage of Days on Which Subject Drank	Average Intake Per Drinking Day (Ounces)
A.A.	20	520	100	26.0
B.B.	20	514	100	25.7
C.C.	20	512	100	25.6
D.D.	19	482	100	25.4
E.E.	19	472	100	24.8
F.F.	18	464	100	25.8
G.G.	19	460	100	24.2
H.H.	19	424	100	22.3
I.I.	20	416	100	20.8
J.J.	17	370	100	21.8
K.K.	20	361	100	18.1
L.L.	17	354	100	20.8
M.M.	17	328	100	19.3
N.N.	20	296	100	14.8
O.O.	20	250	65	19.2
P.P.	20	202	100	10.1
Q.Q.	20	190	85	11.2
R.R.	17	114	53	12.7
S.S.	17	101	47	12.6
T.T.	19	84	95	4.7
U.U.	17	62	65	5.6
V.V.	19	54	32	9.0

drank, and the average amount ingested on the drinking days are indicated in table 1. The number of possible drinking days varied from group to group since holidays were treated as weekend days and alcohol was not available.

Inspection of table 1 reveals a broad range of drinking patterns. For example, K. drank 22 oz. on one day and did not drink again. M., N., and O. drank small amounts occasionally. Patients C. and G. drank about 11 oz. a day with little variation until they stopped, while I. began drinking heavily and gradually tapered off over a two-week period. F. drank heavily for five days and A. for 13 days before abruptly stopping.

The continuing drinkers also demonstrated a wider variety of drinking patterns than would be expected from a "loss of control" hypothesis (table 2). Thus, patient U.U. drank moderately on 65 percent of the possible drinking days and never exceeded 8 oz. a day. Patient T.T. also drank moderately but was more consistent and drank on 95 percent of the drinking days. Both P.P. and Q.Q. drank about 10 oz. a day, but P.P. drank on every possible drinking day with little daily variation, while Q.Q. drank as many as 20 and as few as 3 oz. a day and abstained entirely on several days. Even a heavy drinker, such as J.J., varied his daily intake from 6 to 26 oz. Patient O.O. drank heavily on about two-thirds of the drinking days and not at all on the other third. His abstinent days were interspersed among his drinking days in no set pattern. Moreover, the abrupt termination of the availability of alcohol on nights, weekends, and holidays was accepted by the patients without apparent difficulty.

The "stoppers" provided us with an opportunity to obtain repeated observations when they were drinking (first drinking week) and also after they had stopped and were resisting further alcohol while on a closed ward in the presence of other drinking patients (fourth drinking week). Clinically, these patients appeared to tolerate their voluntary termination of drinking rather well and they did not verbalize any craving for alcohol. Their scores on the measure of discomfort (table 3) did not increase but tended to decrease somewhat from the first to the fourth drinking week of the program. Their self-esteem increased and sleep disturbances decreased significantly, while there were no significant changes in withdrawal or socialization.

According to our criteria, seven of the "stoppers" were categorized as improved at the six-month follow-up. Six patients who did not meet the criteria and two who did not return completed follow-up questionnaires were included in the unimproved category. The improved group did not differ from the unimproved group with respect to educational level, marital status, or occupational stability. The three black patients were all in the improved group. The unimproved group, on the average, was about nine years older (45.3 compared to 36.0 years; $p<.05$, by one-tailed t test) and had been drinking heavily about nine years longer (16.8 compared to 7.1 years; $p<.05$, by one-tailed t test) than the improved group. However, there was no difference between the groups in "severity" of alcoholism as indicated by scores on the MacAndrew Alcoholism Scale (24) or the Drinking Behavior Inventory (25).

The mean scores on sleep disturbance, discomfort, self-esteem, withdrawal, and socialization obtained by the improved and unimproved groups during their first and fourth drinking weeks on the FIDD program are indicated in table 4. In comparison with the "stoppers" who were improved at six-month follow-up, those who were not doing as well had slept more poorly, were more uncomfortable, had less self-esteem, and were more withdrawn while they were in the program.

DISCUSSION

The data are not consistent with the theoretical posi-

TABLE 3
Mean Scores of "Stoppers" While Drinking (First Week) and After Stopping (Fourth Week)

Variable	First Week	Fourth Week	Significance*
Sleep disturbance**	19.1	13.8	$p = .006$
Discomfort	10.9	9.8	$p = .110$
Self-esteem	82.0	91.1	$p = .002$
Withdrawal**	6.5	7.2	n.s.
Socialization**	8.5	9.1	n.s.

*By two-tailed sign test.
**Since these data were not obtained from the first group of patients, N = 12 for these items.

TABLE 4
Mean Scores of Improved and Unimproved Groups of "Stoppers" During First and Fourth Drinking Weeks

Variable	First Drinking Week			Fourth Drinking Week		
	Improved	Unimproved	Significance*	Improved	Unimproved	Significance*
Sleep disturbance**	11.7	29.4	p = .005	6.0	24.6	p = .053
Discomfort	5.2	15.3	p = .026	4.7	13.6	p = .036
Self-esteem	85.0	79.8	p = .226	101.7	83.3	p = .015
Withdrawal**	5.1	8.4	p = .045	6.0	8.8	p = .265
Socialization**	8.7	8.2	p = .459	9.9	8.0	p = .378

*By Mann-Whitney U test.
**Since these data were not obtained from the first group of patients, N = 12 for these items.

tion that drinking by the alcoholic necessarily results in irresistible craving, more drinking, and loss of control. Some of the patients did not drink at all, some drank heavily and then stopped, and some were able to drink moderately and also stop. Even among heavy drinkers, the alcohol intake varied from day to day, drinks could be resisted after large amounts had been ingested, and abstinent days alternated with drinking days.

The patients who stopped drinking appeared to tolerate this rather well and did not express any strong craving for alcohol. Moreover, while resisting further alcohol, they slept better than they had while drinking, their self-esteem increased, they tended to experience less discomfort, and there was no significant change in withdrawal or socialization.

It should be made explicit that these results, as well as those obtained in other studies of experimentally induced intoxication, were based on restricted samples of patients under sheltered, laboratory conditions. Therefore, the findings may have different implications for treatment applications than for research studies.

Although properly criticized by Merry (8) and Pattison (26, 27), the "loss of control" concept, coupled with the goal of complete abstinence, has been extremely useful as it has been applied by Alcoholics Anonymous. They have treated and are treating successfully more alcoholic patients than all other treatment agencies combined (28). Until the researcher is able to demonstrate some better practical techniques, the A.A. approach continues to merit our admiration and endorsement. Unfortunately, many alcoholic patients are unwilling to attend and many are not helped by Alcoholics Anonymous. The number of cases of alcoholism has increased rather than decreased over the years. Further studies are required, therefore, if we are to improve treatment techniques, achieve more understanding, and develop some avenues to prevention.

The patients exhibited varying degrees of control over their drinking behavior while they were on the FIDD program. There is no doubt, however, that there were many times in the past when they had lost control of their drinking and their other affairs. How and why, then, is a patient able to control his drinking at certain times, and what factors make him unable to resist alcohol at other times, under other circumstances? Since the degree and pattern of control varies from patient to patient and from time to time within the same patient, the question for further research is not whether there is loss of control over alcohol or not. Rather, there are many questions about the circumstances and maneuvers that promote more or less resistance to drinking.

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Questions of the Month

For each of the incomplete statements below, *one* or *more* of the completions given is correct. Choose:

A if only *1, 2, and 3* are correct,
B if only *1 and 3* are correct,
C if only *2 and 4* are correct,
D if only *4* is correct,
E if all are correct.

Question 1

Fixation may occur as a result of
(1) over-indulgence
(2) very early toilet training
(3) prolonged dependency gratification
(4) deprivation

Question 2

The Authority which approves residency training programs in the United States includes the
(1) American Medical Association
(2) American Psychiatric Association
(3) American Board of Psychiatry and Neurology, Inc.
(4) National Institute of Mental Health

(The Questions of the Month are from the Self-Assessment Program of APA. The answers are supplied on page 434 of this issue.)

Treatment of Fear of Flying

BY LESLIE SOLYOM, M.D., RICHARD SHUGAR, SHIRLEY BRYNTWICK, AND CAROL SOLYOM, M.A.

In a study of treatment efficacy for 40 patients with air travel phobia, three behavior therapy techniques—aversion relief, systematic desensitization, and habituation—proved equally effective in significantly reducing the phobia, while group psychotherapy was ineffective. However, at follow-up the difference between the two approaches was no longer significant. The authors suggest that the behavior therapy techniques achieved a more immediate result because they were more directly symptom-oriented. In addition, prior extensive flying experience tended to reduce the benefits from treatment.

AGRAS, SYLVESTER, AND OLIVEAU (1), in an epidemiological study of phobias in the greater Burlington, Vt., area, reported fear of flying as intense in ten percent of the population and as mild in 20 percent.

Conventional psychotherapy has been minimally effective in treating fear of flying in military pilots (2–4). More recently, Goorney (5), using systematic desensitization, was able to return five of six experienced aviators to full flying duties. In Aitken and associates' (6) series of 18 military pilots, however, similar treatment was effective in only one-third. For civilian air travelers, desensitization was effective in one case of fear of flying (7) but not in another (8), and drug-assisted desensitization was successful in treating two cases (9).

This paper is a part of an investigation into the effects of different behavior therapy techniques on phobic neurosis (10–12). Air travel phobia was treated with one of three behavior therapy techniques (systematic desensitization, aversion relief, or habituation) or with group psychotherapy, and outcomes of the therapies were compared.

METHOD

Subjects

The best homogeneous sample of 40 patients was selected from a pool of air travel phobics referred by psychiatrists, private individuals, and airline companies. The criterion for selection was an overwhelming and intractable fear of flying manifested in either avoidance or in inability to travel by plane without excessive anxiety.

The first 20 subjects were matched as closely as possible on: 1) age, 2) education, 3) flying phobia score, 4) single phobia (only air travel phobia) versus multiple phobias (e.g., also fear of heights, closed spaces, weather, or open places), 5) duration of flying phobia, and 6) IPAT Anxiety Scale score. They were then randomly assigned to one of the four treatment groups. The other 20 subjects, recruited later, were assigned to the treatment groups to maintain the matched-group design.

Assessments

All subjects were assessed before treatment and one month after termination of treatment by:

1. Psychometric tests—IPAT Anxiety Scale, Wolpe-Lang (13) Fear Survey Schedule (FSS), and Maudsley Personality Inventory (MPI).

2. Psychiatric assessment in a semi-structured interview using a questionnaire detailing psychiatric history, flight experiences, previous psychiatric treatments, and so forth.

3. A 25-item questionnaire on fear of flying. Fear was rated by: 1) a phobia scale from 0 to 4, with 0 corresponding to "no uneasiness" and 4 to "terrifying panic attack if avoidance impossible"; 2) seven items reflecting a fear-motivated attitude, e.g., "Before going on a plane it is wise to buy travel insurance," "Driving a car is safer than driving in a plane"; and 3) in terms of general coping behavior.

On completion of treatment, patients were first requested to take a 35-minute trial flight and then to make a more extensive trip. The latter constituted the pass-or-fail test.

To measure permanency of improvement, a ten-point questionnaire was administered to all subjects 50 weeks after the termination of group psychotherapy sessions.

Therapies

All behavior therapies were administered in the same laboratory, which had been outfitted with 16 standard airplane seats and remote controlled motion picture and finger electric shock facilities. During sessions, subjects sat in the front row of the airplane seats, facing a large screen. The therapist administered the treatment from behind a one-way mirror.

The program of therapy incorporated the individual patient's past flying experiences, or what he imagined they would be, and a common audiovisual presentation

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972. The original title of this paper was "Behavior Therapies of Fear of Flying."

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This study was conducted at Allan Memorial Institute.

TABLE 1
Demographic Comparison of the Four Groups

Variable	Aversion Relief	Desensitization	Habituation	Group Psychotherapy
Age (years)	40.9	40.9	38.1	38.5
Sex				
Male	1	3	4	4
Female	9	7	6	6
Marital status				
Single	3	1	1	0
Married	7	9	8	9
Divorced	0	0	1	1
Education (years)	12.4	12.9	11.6	13.5

of a flight. The 15-minute film showed airplanes taking off and landing, passenger activities on board, and scenes inside airports.

Systematic desensitization. This treatment was carried out according to the description by Wolpe (7). In four one-hour treatment sessions, the anxiety hierarchy was presented in gradual steps to the relaxed subject. During the next four one-hour sessions, the relaxed patient was repeatedly presented with the flight film. Therapy sessions were conducted twice weekly for a total of eight hours within a one-month period.

Aversion relief. Each subject was asked to write and then record three to five accounts (in the first person, present tense) of past flying experiences, describing not only the anxiety-provoking cues, i.e., roaring of the engines and air turbulence, but also the autonomic, cognitive, and behavioral components of his anxiety responses. During eight 30-minute therapy sessions, the tapes were presented to the subject through loudspeakers. Lapses of silence averaging 20 seconds in duration interrupted the narrative at appropriate points (prior to anxiety stimuli and responses) and were followed by finger electric shock (intensity midway between threshold and pain tolerance). Cessation of electric shock, when the patient pressed a button, occurred simultaneously with resumption of the tape presentation. Thus a feeling of relief due to the cessation of electric shock coincided with the description of an anxiety stimulus or an anxiety response.

In the next eight 30-minute sessions, the flight film was presented to the subject. Relief from electric shock was paired with the fear-provoking cues of the experience. An initial continuous reinforcement schedule (electric shock after every pause) was gradually reduced with repeated presentations to a 20-percent partial reinforcement schedule.

The following is an example of a phobic narrative for aversion relief treatment:

When I am—20 seconds—electric shock, button pressed [feeling of relief], *fastened to the seat*—20 seconds—electric shock, button pressed [feeling of relief], *I feel trapped*—20 seconds—electric shock, button pressed [feeling of relief], *my heart is racing.*

An example of a programmed film follows:

Scene of stewardess walking down the aisle—20 seconds—electric shock, button pressed [feeling of relief], (sound) *Fasten your seat belts*—20 seconds—electric shock, button pressed [feeling of relief], *Bumpy weather ahead.*

Habituation. Subjects in this group followed the same procedure as the aversion relief subjects. Tape and film presentations were interrupted but there was no electric shock, and therefore no aversion relief was administered.

Group psychotherapy. Five two-hour group psychotherapy sessions were conducted at weekly intervals. During the sessions, patients discussed their air travel phobias, other neurotic difficulties in terms of their developmental history, rationalizations, and so forth. After the five therapy sessions the group met at the airport with an experienced pilot who thoroughly discussed the safety of air travel, the training of pilots, and so forth, and answered their many questions. One week later, a practice flight, piloted by the same pilot, was arranged for the group and their therapist. Total therapy time amounted to 12 hours plus the 15-minute practice flight.

RESULTS

The general characteristics of the four groups and the group means on the initial values are given in tables 1–3.

No significant differences were found between the groups. However, the male:female ratio is small and the number of unmarried subjects relatively high in the aversion relief group (table 1).

The systematic desensitization and group psychotherapy groups' scores on the IPAT Anxiety Scale repre-

TABLE 2
Group Means on Psychometric Tests (Initial Measures)

Variable	Aversion Relief		Desensitization		Habituation		Group Psychotherapy	
	Mean	Range	Mean	Range	Mean	Range	Mean	Range
IPAT Sten score	7.0	3–9	5.9	3–10	7.0	3–10	6.6	5–9
FSS total fear score	103.8	53–139	84.9	22–146	118.1	52–210	87.5	19–132
MPI neuroticism score	26.2	8–46	21.0	5–40	25.6	2–45	18.8	6–36
MPI extroversion score	25.1	2–41	25.1	17–34	24.1	12–35	28.5	16–44

sented normal values and were lower than those in the aversion relief and habituation groups, but the differences were not statistically significant (table 2). FSS total scores for all four groups roughly corresponded to scores of individuals suffering from a specific phobia (e.g., of an animal or of heights) and fell between the scores of normal controls and those of agoraphobic patients (14).

No statistically significant difference was found in an overall analysis of variance.

In table 3 the mean phobia score represents an intensity of fear corresponding to "strong fear, avoidance if at all possible" in the three behavior therapy groups and to a slightly lower intensity of fear between "definite fear, tendency to avoid" and "strong fear, avoidance if at all possible" in the group psychotherapy group.

Subjects with only air travel phobia slightly outnumbered those who had multiple phobias. Only the habituation group had an equal distribution of subjects with single and multiple phobias.

Duration of phobia was calculated somewhat arbitrarily for older individuals who claimed that they had always been fearful of flying. It was assumed that air travel phobia developed only when travel by plane had become a practical possibility—about 1950. Maximum duration of phobia was therefore set at 21 years. Age at onset of phobia did not differ between the groups.

Previous flying experiences, in terms of number of flights taken, was similar among the groups. Because patients' recall proved unreliable beyond a high number of flights (discrepancies were found between different sources of data), six or more flights were arbitrarily counted as six. Only three subjects, two in the habituation group and one in group psychotherapy, had never flown.

For purposes of this report, data on outcome of treatment have been restricted to those measures directly related to air travel phobia. Did the subject take a plane? What is his phobia score? Has his attitude about flying changed?

Data are tabulated only for the individual and combined behavior therapy groups. In the group psychotherapy group, only one subject, who had never flown before, passed the test flight. The group's mean phobia score decreased from 2.8 to 2.5—a nonsignificant change. Changes on other variables were also insignificant.

TABLE 3
Pretreatment Measures of Phobia

Variable	Aversion Relief	Desensitization	Habituation	Group Psychotherapy
Mean phobia score	3.1	3.0	3.4	2.8
Ratio of single to multiple phobias	6:4	6:4	5:5	7:3
Agoraphobia	3	1	3	1
Mean duration of phobia (years)	13.6	11.6	10.2	10.2
Mean age at onset (years)	27.4	28.2	27.9	28.0
Mean number of flights	5.3	5.2	3.3	4.3

Results in the behavior therapy groups are given in table 4. Each group demonstrated a significant improvement in mean phobia score ($p < .01$). Differences between the groups are nonsignificant. The most important test was the flight test since it measures observable behavior. Seven or eight subjects in each of the aversion relief, systematic desensitization, and habituation groups passed the test flight—for an overall rate of 73 percent. The mean phobia score decreased by 1.7 units, with 15 subjects (50 percent) reporting a drop of two or more units. The magnitude of change in scores on the FSS airplane subscale was similar, but the shift in attitude was negligible. Results of the flight test were significantly related to other measures of outcome—phobia score ($\chi^2 = 20.5$, df=4, $p < .001$) and FSS airplane subscale score ($\chi^2 = 16.72$, df=4, $p < .01$).

Of the totally phobic group, i.e., subjects who could not fly at the beginning of treatment, 78 percent passed the test flight and changes in phobia score were similar to those of the total group. Slightly more individuals with multiple phobias (77 percent) passed the test flight than individuals with a single phobia (71 percent).

Group responses to a follow-up questionnaire are presented in table 5. Data were collected from 80 percent

TABLE 4
Pretreatment and Posttreatment Group Means for Behavior Therapy Groups

Variable	Aversion Relief		Desensitization		Habituation		Combined Group	
	Before	After	Before	After	Before	After	Before	After
Passed flight test		8		7		7		22
Phobia score	3.1	1.5*	3.0	1.5*	3.4	1.5*	3.2	1.5*
Passers	2.9	1.3*	3.0	1.0*	3.4	1.3*	3.1	1.2*
Failures	3.5	3.3	2.3	2.0	3.5	2.5	3.0	2.5
FSS airplane subscale	3.8	2.1*	3.8	1.3	4.0	2.7*	3.9	2.2*
Attitude	5.2	4.5	4.0	3.4	4.8	4.7	4.7	4.2

*$p = .05$ or better.

TABLE 5
Group Comparison at Follow-Up

Variable	Aversion Relief	Desensitization	Habituation	Group Psychotherapy
Length of follow-up (months)				
Mean	17.7	12.7	14.5	11.5
Range	8–24	8–24	9–24	—
Percentage of subjects with anticipatory anxiety	30	40	40	60
Percentage of subjects with minimal or no anxiety during flights	80	70	70	50
Number of flights after treatment				
Mean	8.0	5.4	1.8	1.7
Range	2–12	2–15	2–4	2–4

of the subjects. Of the remaining eight, two had left the province and have not yet replied; two reported that they had become pregnant and had given up all intent to fly at this time; and four subjects could not be located.

One subject in the aversion relief group suffered a temporary and slight setback but was later able to continue flying without fear. All other patients maintained their improvement. To our great surprise, five (50 percent) of the group psychotherapy subjects also took flights with much reduced or no anxiety. Not unexpectedly, however, anticipatory anxiety still continues to plague even some of the subjects who no longer experience anxiety during flight. A more extensive follow-up inquiry using the same assessments as before is currently under way.

Upon comparing those subjects who had flown less than six times before treatment with those who had flown more than six times, a nonsignificant but perhaps important result emerges. In the former group 85 percent passed the test flight, while in the latter group only 63 percent passed.

In an attempt to identify prognostic indicators, correlations were made between variables taken from the clinical history, psychometric tests and fear of flying questionnaire, and outcome on the pass-fail test. No important correlations emerged, although as a whole those who passed were older (41.5 versus 36.7 years). Their IPAT Sten scores,[1] MPI neuroticism and extroversion scores, and duration of phobia were remarkably similar at the beginning of treatment. Those who passed showed a consistent but statistically nonsignificant trend to more improvement in the psychometric test scores than did those who failed. It should be noted, however, that these scores were initially close to the normative scores for a similar population.

[1] A conversion of raw scores to a 0–10-point scale.

DISCUSSION

The three behavior therapy techniques seem to have been equally effective in significantly reducing air travel phobia. Group psychotherapy, by comparison, was quite ineffective at the termination of treatment, although at follow-up the differences among the four groups were no longer significant. One may assume that the behavior therapies achieved a more immediate result because they are more directly symptom-oriented. Their beneficial effect on the phobia is more readily realized by the patient, who then no longer avoids air travel. In contrast, the effect of group psychotherapy seems to develop slowly because it is only indirectly oriented toward the specific symptom. It deals with the historical antecedents and sources of anxiety, of which air travel phobia is only one manifestation. Insofar as the effect of group and perhaps individual psychotherapies is concerned, one may speak about an incubation of effect similar to the incubation of fear (phobia) that develops after a traumatic experience.

The lack of a significant difference between the results of sytematic desensitization and aversion relief therapies was not unexpected, since similar findings were obtained from a clinically more severely phobic population (10). What was perhaps unexpected was that habituation therapy—where neither aversion relief nor relaxation was used to lessen fear—proved as effective as either systematic desensitization or aversion relief. This is in contrast to the ineffectiveness of habituation in the treatment of phobic (primarily agoraphobic) neurosis (15). Perhaps the difference in outcome was due to the difference not only in type of phobia but also in initial anxiety levels. The air travel phobic subjects who received habituation therapy had a mean IPAT Sten score of 6.9, while the agoraphobic subjects had a mean Sten score of 8.0—a nonsignificant but important difference. Lader and Matthews (16) observed that while habituation of the orienting response occurred when the subject's anxiety was low, augmentation of the response occurred when the anxiety level was high.

In planning treatment, perhaps another important variable is the duration of the exposure to the phobic situation in the laboratory and/or in life. Experiments concerned with the reinstatement of fear (17) demonstrated a curvilinear relationship between the length of exposure to the fear-provoking situation and the magnitude of the fear response. At shorter exposure times an increase in duration led to an increase in fear, while at longer periods of exposure, a decline and, finally, extinction of the fear response occurred. Longer exposure time led to a reduction of phobic avoidance in cases of specific phobias (18). In contrast, prior to treatment our subjects did not report less anxiety at the end of a long flight (e.g., Montreal to Israel) than at the end of a shorter flight (e.g., to London

or Miami). Extensive previous flying experiences indeed tended to reduce benefit from the treatment. A primary but as yet unknown factor is the interaction between anxiety level and exposure time. Total phobia and multiple phobias were not predictive of poor treatment results.

Some reports (19) have questioned the necessity of relaxation in the desensitization of phobias, and one wonders what the effective ingredient in any of the behavior therapy techniques is. A parsimonious theory would suggest that repeated exposure to the sight and sounds of a flying experience while in a safe environment and exposure to fear in small, controllable doses, with the option of interrupting the experience at will, reduces the anxiety attendant upon the flying experience.

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DISCUSSION

JOHN M. RHOADS, M.D. (Durham, N.C.)—Dr. Solyom and his associates present an interesting study of the treatment of 40 patients who suffered from phobic neurosis and who had in common a fear of flying. They compared the efficacy of four methods of treatment.

Air travel phobia is quite common, as anyone can tell by standing around in an airport and watching people pop pills before boarding airplanes. It would be interesting to compare the cost of the pills taken by a person who is required to travel by air frequently with the cost of eight hours of behavior therapy. Considering the high recovery and improvement rates and the fact that flying can be a reasonably pleasant or at least a neutral experience, as compared to an unpleasant or frightening one, I would think that the cost of the behavior therapy would be well worthwhile.

The failure of group therapy is not surprising, since treatment of this problem is not what group therapy is best for. An additional factor contributing to its failure may have been that a negative expectation on the part of the group therapist was communicated to the patients. As the authors note, group therapy may be useful in preparing patients for behavior therapy as, for example, in the study by Birk and associates (1), which involved aversion relief treatment of homosexuals following a year of group therapy. In a case such as that, group therapy is more nearly in its element, that is, in dealing with characterological problems and with relationships among and between people.

This paper once again demonstrates that the therapy of neuroses need not be related to eliciting their origins. While the authors don't dwell upon it, and in fact don't even mention it, it seems clear that they accept the idea that once a neurosis begins, it develops an autonomous life of its own and can be treated as an independent entity.

The authors ask why behavior therapy works. They suggest that when the patient is repeatedly exposed to the triggering stimuli in a safe environment and has the option of interrupting the experience at will, it reduces his anxiety. This is an interesting idea and suggests that what perhaps occurs is a regaining of control by the patient—a control almost entirely lost in the case of a phobia. Perhaps some of the failures of behavior therapy are thus related to the problem of whether the person has enough motivation to want to gain control or whether in some perverse way he is relatively content with his distress.

The study offers further conclusive evidence of the efficacy of different types of behavior therapy for the treatment of phobic neuroses.

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Cheap Labor from Poor Nations

BY E. FULLER TORREY, M.D., AND ROBERT L. TAYLOR, M.D.

In the authors' opinion, one of the most serious problems facing American psychiatry is the importation of large numbers of foreign medical graduates to staff the country's mental hospitals. This paper reviews the magnitude of the problem, the utilization of these doctors as "cheap labor," the quality of care provided, and the effects of the "brain drain" on the countries of origin. It discusses possible roots of the problem and suggests some solutions.

A RECENT ISSUE of *Psychiatric News*, the official newspaper of the American Psychiatric Association, contained a remarkable letter. It was from a psychiatrist who advocated increasing the loopholes for using nonlicensed foreign doctors in state mental hospitals. The rationale given was that the only American psychiatrists he had been able to recruit had turned out to be alcoholics, drug addicts, or otherwise seriously disturbed and therefore that foreign doctors were certainly to be preferred (1).

This letter affords a capsule summary of a serious problem facing American medicine in general and American psychiatry in particular. It is the problem of having to import large numbers of foreign doctors to staff our hospitals for the mentally ill. There are indications that these doctors are used primarily to staff public institutions, that some of them may not provide as high a level of care as their American-trained counterparts, and that they are badly needed in the countries of their origin. This paper discusses the problem and offers some solutions.

While there are no absolute figures on the number of foreign medical graduates being used in American psychiatry, there are some indicators. In American medicine generally it is known that approximately 8,500 foreign medical graduates enter the United States each year; since 1967 the number entering annually has been greater than the total number of doctors graduating from U.S. medical schools (2, 3). It is also known that in 1970 there were 3,016 foreign medical graduates who were given licenses to practice permanently in the United States; these constituted 33 percent of all newly licensed physicians. In 1971 foreign medical graduates comprised over half of all new licensees in 13 states, and in two states (Maine and Delaware) they were more than 90 percent of all new licensees (4).

Specifically in regard to psychiatrists, it is known that during 1970, 34 percent of all psychiatric residents (1,370 out of 4,040) were foreign medical graduates (5). Of the 186 residency programs that were active, 28 were *completely* filled by foreigners. In fact, there were more psychiatric residents in American hospitals who had graduated from the medical schools of the University of Havana (77) or from the University of Santo Tomas in Manila (74) than there were graduates of *any* American or Canadian medical school (5).

One of the largest groups of foreign-trained doctors in American psychiatry rarely shows up on official statistics. These are the unlicensed doctors who practice in state hospitals using temporary permits issued by a state and valid only for state institutions. All but seven states have loopholes in their licensing laws that allow such temporary licensing. The permits are renewable yearly for an unlimited number of years. In New York and Ohio, 40 percent of the physicians in the state mental hospitals are unlicensed (6–8). In West Virginia it is over 90 percent (4). If 40 percent is a representative average for the United States, there would be approximately 3,100 unlicensed foreign doctors staffing state mental facilities in this country. One AMA spokesman estimated that the number is more like 7,500 (4).

FOREIGN PSYCHIATRISTS AS "CHEAP LABOR"

Foreign-trained psychiatrists work predominantly in those institutions which American psychiatrists consider the least desirable. Thus they are found in large numbers in city and state hospitals, prison hospitals, and institutions for the mentally retarded. Elmhurst City Hospital in New York City had 35 psychiatric residents in 1970, all of whom were foreign trained (5). State mental hospital residency programs depend very heavily upon them, as table 1 shows. Less than five percent of foreign-trained psychiatrists are in private practice in this country (9), in contrast to the more than 50 percent of U.S.-trained psychiatrists who are (10).

Theoretically foreign medical graduates are in residency training programs for training. But in fact such programs are often so burdened by the service needs of the state institutions that little time remains for any for-

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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The views of the authors do not necessarily represent those of NIMH or the United States Public Health Service.

mal training. If the foreign graduate is unlicensed, he may be confined to the state system that has granted him his temporary permit until he can pass the state licensing examination. Some states also use psychiatric residency slots as administrative mechanisms for hiring foreign doctors at a lower salary than a full staff position would require, or when no full staff positions are available. This may help to explain why in 1971 at least five foreign-trained psychiatric residents were over the age of 60; two of these were 69. Such residents can presumably receive both a stipend for training and Social Security retirement benefits simultaneously.

Because of their concentration in public institutions, patients who cannot afford private psychiatric care are more likely to be treated by foreign-trained psychiatrists. Table 2 indicates this pattern. The cost of hospitalization in an institution like the Columbia Psychiatric Institute in New York or Timberlawn Hospital in Dallas may be as high as $3,000 a month; the state hospital is of course free if the patient has no money. This is consistent with other aspects of American psychiatry and can be summarized by Arnold Rogow's observation: "Perhaps the only firm conclusion is that Americans, in general, receive the psychiatrist and the psychiatric treatment *not* that they deserve, but that they can pay for. . ." (11).

TABLE 1

*Foreign Medical Residents in Selected State Hospital Systems, 1970**

State	Number of Residency Programs	Total Number of Psychiatric Residents	Foreign Medical Residents	
			Number	Percent
New York	18	211	198	94
Rhode Island	1	11	10	87
New Jersey	5	38	33	87
Massachusetts	7	51	41	80
Connecticut	3	46	37	80
Ohio	5	86	67	78
Maryland	3	22	17	77

*University hospitals that are state supported are not included in the calculations since they usually do not accept patients for long-term care.

THE QUALITY OF CARE

The majority of great ideas and advances in psychiatry have come from foreign-trained psychiatrists. Kraepelin, Freud, Jung, Adler, and many others not only were trained in foreign institutions but made their major contributions in foreign countries. Thus there is nothing inherently inferior (or superior) in being foreign-trained; rather, it depends solely upon the individual psychiatrist and his specific training experience.

It is likely that many leaders of American psychiatry will emerge from among the large influx of foreign psychiatrists coming to the United States. However, there are also indications that among the foreign-trained group there are some whose level of psychiatric expertise is not up to generally accepted American standards. This is seen most readily among a few of the unlicensed doctors, such as the doctor in a New York State mental hospital who was successfully sued for neglecting a fatal subdural hemorrhage (12) or the alleged doctor in an Illinois mental hospital who was recently charged with reckless conduct for the treatment of three patients who died (13).

The majority of foreign medical schools offer little or no psychiatric teaching to medical students. When they graduate, these doctors often arrive in the U.S. for a psychiatric residency with less knowledge of psychiatry than most American trainees at the same level. If the residency is in a hospital with a heavy service commitment, such as a state hospital, the resident will find it even more difficult to catch up.

Language difficulties compound the problem. Psychiatry, in contrast to radiology or pathology, is the medical specialty in which communication between the doctor and the patient is absolutely essential for adequate diagnosis and treatment. Equally important are possible cultural differences and the lack of a similar world view between doctor and patient. Imagine the difficulty, for instance, of a psychiatric resident from Korea trying to assess the mental problems of a drug-abusing American adolescent who is undergoing an existential crisis. In the light of such communication barriers a statement made by the director of mental hygiene in Ohio is slightly odd. In announcing special basic English courses for doctors in the state mental institutions he said: "I hasten to point out that we seldom hear a complaint that our foreign doctors are not providing adequate care and psychiatric treatment for their patients. The complaints center only around the inability to communicate" (14).

There are objective indicators that American psychiatry may not be attracting the best of the foreign medical graduates. One such indicator is the examination of the Education Council for Foreign Medical Graduates (ECFMG), an examination offered to medical graduates all over the world as a measure of their medical knowledge. It is made up in such a way that 98 percent of American medical graduates taking it for credit pass it. When it is given to medical graduates all over the world, only 40 percent of them pass it. Looking specifically at the pass rate for the eight foreign medical schools that contributed the greatest number of residents to American psychiatry in 1970, only two attained the worldwide average of 40 percent or higher (2). The two medical schools contributing the most psychiatric residents (the University of Havana and the University of Santo Tomas) had pass rates of only 20 and 13 percent, respectively. Similarly, on state licensure examinations the graduates of these two schools scored below the average pass rate of 63 percent for all foreign medical graduates. This in turn is considerably below the pass rate of 91 percent for American medical graduates (2). Four foreign medical graduates actually failed state board examinations for the 13th time during 1970. Between failures, such individuals may remain employed in state hospitals in most states on temporary permits.

In order to fully assess the quality of care offered by

TABLE 2

Percentage of Foreign-Trained Psychiatric Residents in Selected Psychiatric Hospitals with Private Patients and with Public Patients

State	Hospitals with Private Patients	Psychiatric Residents Total Number	Psychiatric Residents Foreign Trained Number	Psychiatric Residents Foreign Trained Percent	Hospitals with Public Patients	Psychiatric Residents Total Number	Psychiatric Residents Foreign Trained Number	Psychiatric Residents Foreign Trained Percent
Connecticut	Yale-New Haven Medical Center	88	8	9	Norwich State Hospital	15	14	93
	The Institute of Living	27	6	22	Fairfield State Hospital	19	15	79
Georgia	Emory University Hospital	34	2	6	Central State Hospital	15	13	87
Illinois	Michael Reese Hospital	23	3	13	Illinois State Psychiatric Institute	41	25	61
Iowa	University of Iowa Hospital	15	6	40	State Mental Health Institute	11	10	91
Maryland	Johns Hopkins University Hospital	35	4	11	Spring Grove State Hospital	8	6	75
Massachusetts	Boston University Medical Center	15	0	0	Medfield State Hospital	8	8	100
	McLean Hospital	25	4	16	Metropolitan State Hospital	10	7	70
Michigan	University of Michigan Hospital	45	12	27	Northville State Hospital	16	14	88
Missouri	St. Louis University Hospital	9	1	11	Missouri Institute of Psychiatry	37	35	95
New York	State University (Kings Co.) Hospital	45	7	16	Brooklyn State Hospital	15	14	93
	Columbia Psychiatric Institute	44	5	11	Manhattan State Hospital	23	20	87
	University of Rochester Hospital	39	9	23	Rochester State Hospital	10	9	90
Ohio	University of Cincinnati Hospital	49	5	10	Rollman State Psychiatric Institute	29	19	66
	University Hospital of Cleveland	18	2	11	Fairhills State Psychiatric Institute	22	20	91
	Ohio State University Hospital	22	1	5	Columbus State Hospital	13	11	85
Oregon	University of Oregon Hospital	15	1	7	Oregon State Hospital	5	3	60
Pennsylvania	University of Pennsylvania Hospital	42	3	7	Philadelphia State Hospital	13	8	62
Texas	Timberlawn Psychiatric Hospital	10	0	0	Terrel State Hospital	6	4	67
Virginia	Medical College of Virginia Hospital	11	2	18	Central State Hospital	7	7	100
Washington	University of Washington Hospital	39	5	13	Western State Hospital	5	4	80
Wisconsin	Marquette University Mental Health Center	11	0	0	Winnebago State Hospital	3	3	100

psychiatrists who have been trained abroad, a careful clinical examination would have to be given. At present, this has not been done. In fact, it is quite conceivable for a foreign medical graduate to come to the United States and become fully licensed to practice psychiatry without ever being tested on his psychiatric knowledge. The examinations that he must pass (the ECFMG and a state board) have very few questions on psychiatry, and his residency program may never examine him formally.

THE "BRAIN DRAIN"

The other major consequence of using large numbers of foreign psychiatrists as cheap labor for the United States is the effect this has on the countries from which the foreign doctors come. This has been referred to as the "brain drain."

The countries that contributed the greatest number of psychiatric residents to the United States in 1970 (15) were the following: the Philippines—149 residents, India—136, Korea—107, Cuba—95, Argentina—55, Colombia—46, Iran—39, Mexico—25, Egypt—19, and Pakistan—19. This list corresponds with the frequently cited estimate that 85 percent of our imported medical manpower comes from underdeveloped countries.

While it is often said that the Philippines produces more doctors than it needs, this is not true. Only Manila and the other large cities are oversupplied with physicians; the remainder of the country has a low doctor-population ratio (16). Yet Filipino doctors are continuing to come to the United States in large numbers. The number of medical graduates taking the ECFMG in Manila is now so large that a football stadium has to be used to accommodate them for the examination (3).

Korea is another country that has been hit especially hard by the flow of trained doctors to the United States. In the past 20 years 23 percent of its physicians have departed, and only 3 percent have returned (17). Recently 90 percent of the graduates of one Korean medical school left Korea for U.S. internships; this same year there were 65 vacant internships in Korea. Korea, it should be noted, has a doctor-population ratio outside the capital of 1 to 17,000; the United States has a ratio of 1 to 700.

Overall it is not known how many of the foreign medical graduates who come to the United States for psychiatric training return to their homelands, but it is agreed that the returnees are a minority. A study of psychiatric residents from Mexico in the United States showed that 46 percent of them eventually returned to Mexico (18). A

director of a training program staffed predominantly with foreign residents found the return rate to be much lower: only two of his 34 foreign psychiatric residents from developing countries had ever returned to their homelands to practice (19). Furthermore, even for those who do return, it may be questioned whether the quality of their training experience has been appropriate for their country's needs on their return home.

It is known that taking this medical manpower from other lands saves the United States a large amount of money. If the 3,016 foreign doctors who were permanently licensed in the United States in 1970 had to be trained in the United States, they would require the addition of 30 new medical schools. To build a medical school costs at least $50 million and to operate one for a year averages $3.8 million (3). Thus the total amount needed to replace the foreign-trained doctors who were permanently licensed last year would be $1.6 billion. This is the equivalent of over half of the total U.S. foreign aid program. When this amount is added to other aspects of the brain drain, it may well be that our foreign aid program is in effect canceled altogether.

HOW THE PROBLEM CAME ABOUT

It is useful to inquire in retrospect how it developed that the United States is finding it necessary to import large numbers of psychiatrists from poor nations to staff our public mental institutions. Understanding the roots of the problem may be an initial step toward correcting it.

First it should be noted that a conscious conspiracy to take doctors from poor countries does *not* exist. Conspiracies imply planning, and anyone familiar with the inner workings of American psychiatry knows that this degree of planning simply does not exist. It is, in fact, the *absence* of planning that is closer to the root of the problem.

Who, then, is responsible for the absence of planning? Certainly not the foreign doctors themselves, who are only availing themselves of the best opportunities to further their careers and their livelihood. Indeed, how many American psychiatrists can say that they would not move to Manila to practice if they were offered a salary ten times what they are making here? Nor can public mental hospital administrators be held responsible; they are just trying to carry out their mandate to secure psychiatrists for their staffs.

Planning for the needs of American psychiatric manpower theoretically rests with the federal government (through the National Institute of Mental Health and the Bureau of Health Manpower Education) and with the professional associations (the American Medical Association and the American Psychiatric Association). We believe that none of these organizations has done a satisfactory job of planning; this is the root of the problem.

The National Institute of Mental Health has supported the training of psychiatrists since World War II, until recently at a rate of $40 million a year. Yet during this time it has made virtually no effort to ascertain what the psychiatrist was doing once he was trained. If it had gathered such data, it might have instituted a period of mandatory public service for psychiatrists who had been trained with public money. This would have ensured some psychiatric manpower for public institutions rather than allowing the psychiatrists to go immediately into private practice.

Similarly, the Bureau of Health Manpower Education has concentrated too much attention on increasing the total number of doctors and too little on the geographical distribution of the doctors. The myth has been that if the total number is increased sufficiently, there will be enough to go around. This is apparently not true. In the Philippines, for instance, there is an excess of doctors in the capital city, but the excess doctors have been found driving taxis and taking other jobs rather than leaving the capital to practice medicine in rural areas, where they are badly needed. It may well be that the United States already has enough doctors (and particularly psychiatrists) for its overall needs, if they were distributed more evenly. Our 25,000 psychiatrists constitute almost one-third of the world's total. Certainly many European countries are providing superior public psychiatric services with a far lower psychiatrist-population ratio than we have.

The American Medical Association has been doubly shortsighted. For many years this organization denied the existence of an impending doctor shortage. More recently it has acknowledged that there is a shortage, but has reacted only by trying to increase the absolute numbers without attempting to affect the geographical or specialty distribution. The American Psychiatric Association has made these same errors and has assumed that increasing the number of psychiatrists would somehow improve public service.

Both of these professional organizations may also be faulted for rigidly upholding outmoded standards that require a person with a medical license (i.e., a psychiatrist or other physician) for many jobs in public mental institutions that could just as satisfactorily be done by a person without a medical license (i.e., a psychologist, social worker, or nurse). Similarly, it is the combination of these two organizations that has accredited the state hospital residency "training" programs, which are training in name only and really are means of obtaining service personnel.

The U.S. Immigration Service and the State Department have compounded the problem of foreign doctors coming to this country. The liberalized immigration laws enacted in 1962, 1965, and 1970 made it increasingly easy for doctors to both come to and remain in this country. These liberalizations in the laws were made despite hearings warning against them in the Senate in 1967 (before the Senate Subcommittee on Immigration) and in the House of Representatives in 1968 (before the House Committee on Government Operations). Even prior to that (in 1966) Senator Walter Mondale raised his voice on the Senate floor and called the brain drain "a national disgrace" (20). Simultaneously the State Department was compiling a report attempting to deny that any brain drain problem existed (21).

The problem is also due to lack of planning in the developing countries themselves. By not setting up training facilities in their own hospitals, by often retaining a promotion system based on seniority rather than ability, and by permitting their doctors to leave before they have repaid their public-subsidized medical training with public service, the developing countries have encouraged their doctors to permanently emigrate to the United States and other countries.

SOME SUGGESTED SOLUTIONS

The problem of having to import large numbers of doctors from poor nations to staff our public mental institutions is a very serious one; it demands a solution. The following are suggested directions that could be pursued:

1. *Functional job analysis.* Psychiatry is going to have to do some hard thinking and functional job analysis on the tasks that psychiatrists are currently doing. Exactly what kind of training does one actually need to treat persons who are mentally ill? Do we really believe that an Iranian or a Korean psychiatrist, because he is a psychiatrist, is more effective than an American clinical psychologist in treating an American patient who is mentally ill?

2. *Public service.* American psychiatrists who are trained with public money should be expected to repay their debt with a period of public service and not just go directly into private practice. A loan system to replace present stipends would be one way to bring this about.

3. *Accreditation.* A system of mandatory accreditation is needed for every psychiatrist and psychiatric training program. This would help screen competent psychiatrists from those who are not competent (22).

4. *Separation of training and service.* In order to make all psychiatric residency training programs into *true* training programs, they must not be based on service needs. The service needs of public mental institutions must be filled apart from any training programs taking place there. Until this is done it is inevitable that some training programs will be merely facades for delivering services through the use of less expensive personnel. And if the trainees themselves are allowed to define how they want to achieve their training goals, one has the beginning of a true system of education (23).

5. *Improved training abroad.* It is possible to improve the training of doctors in their home countries so as to obviate the necessity for many of them to come to the United States on what become one-way trips. For instance, television and communications satellites will soon be available for long-distance teaching. Another possible use of modern technology would be to hook up computer outlets in other countries to an information and retrieval system in the National Library of Medicine.

6. *Specialized training programs.* There should be specialized training programs in which psychiatrists from abroad would come here to learn specialized skills and then return to their own countries. These programs would emphasize aspects of psychiatry that are appropriate for the developing countries. An excellent example of what can be done along these lines is the program for Indonesian psychiatrists set up at the University of Hawaii under Dr. John McDermott.

7. *Changes in the immigration laws.* Finally, there would have to be changes in the immigration laws so as to make it more difficult for foreign doctors to stay in the United States.

We recognize that solutions which include such things as obligated public service in exchange for public training and mandatory accreditation for individual psychiatrists are in conflict with the inclinations of many American psychiatrists. These are, it is said, contrary to the free enterprise model. We do not think that this is necessarily so. Benjamin Rush was both the father of American psychiatry and a signer of the Declaration of Independence. It is doubtful whether he saw a free enterprise system as meaning the freedom to take manpower from poorer countries in order to provide public services in wealthier ones

We also recognize that these solutions are not simple. But then, neither is the problem. American medicine in general, and American psychiatry in particular, are currently so dependent on foreign doctors that to suddenly remove them would precipitate a collapse of the whole system.

Solutions must be found. We should move rapidly toward a point when no longer would one find vignettes like one recently published in *The Washington Post* on conditions at the state prison in West Virginia. The article described the need for professional help for the inmates and mentioned that there *is* one psychiatrist "but he is a Cuban and does not speak English" (24). American psychiatry should be able to do better than this.

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DISCUSSION

ROBERT CSERR, M.D. (MEDFIELD, MASS.)—To begin with a very unambiguous statement regarding this paper, the authors have portrayed the problem of foreign-trained physicians very accurately. They are telling it as it currently is, although I wonder at their figure of 50 percent of American psychiatrists being engaged in full-time private practice. The impressions that foreign-trained psychiatrists work in settings (usually institutional) that U.S. psychiatrists consider the least desirable and that "training" for them is often really a euphemism for "service work" because of the absence of real supervisory concern for their assimilation of knowledge are unfortunately very accurate in many instances.

Certainly, as the authors point out, there is no reason to feel that the quality of care per se delivered by a foreign-trained psychiatrist need be inferior to that delivered by his U.S.-trained counterpart. But with the two-class system of psychiatric training supported in this country, this frequently represents reality. What seems to prevail for foreign physicians, therefore, is: 1) their use (or misuse, as the case may be) as primary service-deliverers, although they are said to be in training, and 2) their general inadequacy, because of the lack of special attention to their needs, for the American psychiatric scene.

I would like to discuss these two issues and the specific approaches we have undertaken at Medfield State Hospital to deal with them; some of our work seems very much in consonance with the spirit of this article. First, to insist that only physicians are capable and effective in the areas of evaluation and treatment is unmitigated foolishness. At Medfield we have been able to remove all residents in training from the area of primary delivery of services by creating a cadre of clinical case administrators (paramedical professionals and preprofessionals), through whom the service needs of the patients are met. Supervision of these case administrators is by a group of experienced professionals, including psychiatrists. Residents have a bona fide training program: the service they give, although frequently extensive and valuable, is incidental to and a part of their training. This approach has indicated to us quite unequivocally the direction in which we must move to increase the extent and quality of services—namely, the training and employment of these other professionals and preprofessionals.

Second, special attention must be paid to the background and needs of the physicians-in-training from developing nations. There must be a flexible curriculum that includes subjects relevant to their needs, so that they can function as psychiatrists both in the U.S. setting and in their own nations after their training is completed.

The New England Psychiatric Society recently surveyed the problems concerning foreign-trained psychiatrists in our area. Dr. N.S. Mittell, Medfield's director of residency training, headed a task force that developed a recommendation to create an ombudsman to help foreign medical graduates get through the developmental crises that confront them in adapting to American society and psychiatry. The ombudsman would also attempt to ameliorate the numerous irrational harrassments facing these physicians.

I would now like to comment on the authors' proposed solutions of the problems concerning foreign medical graduates; I agree with some but disagree philosophically with others.

Certainly far too much public money has been spent on training psychiatrists who immediately move into the private sector with little recognition of their obligation to the public sector for subsidizing their training. But the attraction, both in terms of financial reward and in the opportunity to work with relatively more gratifying and less troublesome patients, is an overwhelming inducement. However, this is only one factor. I shall discuss another—the negative attitude prevailing in many state hospitals—shortly.

Surely some arrangements can be made incorporating the concept of universal conscription for a limited period of time for those trained at the public expense; this could even include the military as a "public institution" in which professionals could meet their obligations. However, I would strongly disagree with any plan that would definitively and perhaps permanently deprive any person, including a physician, of the freedom to practice his profession or trade where he wants. Such a policy would ultimately have devastating effects on the quality of the trade or profession. Although the authors do not say so explicitly, I am left with the uncomfortable feeling that, in their frustration, the authors are suggesting that, in order to ameliorate the situation in which foreign physicians are impressed into "slave-service" labor in public hospitals, U.S. psychiatrists should be treated in the same repressive way—then all would be equitable. This would hardly be a solution; in fact, I would expect this approach to compound the already indefensible situation present in so many of our public institutions. I would like to recall the approach I mentioned earlier: the greater use of other professionals and preprofessionals, which seems very much in accord with the authors' ideas.

In addition, I want to stress a very important issue that the authors seem to have neglected—namely, the conditions in and attitudes of many public institutions, which allow and indeed encourage poor care and care givers. Certainly the feudal attitudes on the part of the administrators of many public institutions hardly provide an incentive to anyone to find newer and better ways of rendering service. A dismal attitude on the part of professionals in public service, and in the private sector as well, has been shared for a long time by the community, which makes the job of change far more difficult but at the same time far more challenging and potentially rewarding. No amount of "quota-ing," in-country or out-of-country, is going to solve what is essentially a philosophical and attitudinal problem; only the people in charge of the institutions can begin to do that. Public institutions, including state hospitals, must change their philosophies and attitudes drastically so that an air of

rejuvenation rises from the old edifice, so that it becomes an exciting place to be rather than a warehouse, so that its considerable resources are deployed in active treatment, not as a home for the persona non grata. In the process of this transformation, improved training, both abroad and in this country, perhaps subsidized by both governments, can be developed. The obligations to their own country and to the United States that must be met by the resident-in-training can be specified. Rather than using the U.S. society as a prototype, the specific needs of developing nations might be considered in the training that foreign psychiatrists receive, both in the United States and in their own countries.

But the development of all this will have to be based on a change in attitude, not on military discipline. Many of the problems relating to foreign-trained physicians in second-class settings, where they are employed as "cheap labor" while ostensibly in training, would cease to exist if the second-class settings themselves moved with conviction toward becoming first-class. In addition to the resources currently available to them, they would need a great deal of imagination and daring and much more hard work. This is the approach we are using at Medfield State Hospital; it seems to be working.

It would be well for me to point out in conclusion that there are many paths for a career in psychiatry; that public and private service can and ought to coexist and that working with severely deprived or ego-damaged individuals is quite different from working with gifted individuals to further develop their considerable potential. (The two poles seem, at times, to be equated with public service and private practice, respectively.) Certainly both of these tasks are important; I will not debate which is more valuable to our society as a whole, although the latter will continue for a time to be compensated better, both financially and in terms of prestige, until some effective counter-compensations emerge. These counter-compensations are what I alluded to when I talked about change as a foundation for a public institution program. Psychiatry must become aware of the reality of the position it is finding itself in today with regard to the demands for and expectations of service. It must not move to either extreme—to the public sector at the expense of the private or to the private sector at the expense of the public. Either extreme, as with human beings and their behavior, brings forth trouble, which we call pathology. Certainly psychiatry should be able to reconcile the disparate elements of its feelings and behavior better than that, and further both public and private programs without resorting to extremism.

Answers to Questions of the Month

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Foreign Medical Graduates: A Symposium

MILTON H. MILLER, M.D., FIKRE WORKNEH, M.D., EUGENE B. BRODY, M.D., DAVID J. LEWIS, M.D., AND TSUNG-YI LIN, M.D.

A session of the annual meeting of the American Psychiatric Association in Dallas, Tex., on May 2, 1972, was devoted to "Foreign Medical Graduates." Those presenting papers were members of the APA Task Force on Foreign Medical Graduates.

The participants were:

Milton H. Miller, M.D., Professor and Head, Department of Psychiatry, University of British Columbia, Vancouver, Canada, speaking on behalf of himself as chairman of the task force and of his associate, Tsung-yi Lin, M.D., Professor of Psychiatry and Professor of Mental Health, University of Michigan, Ann Arbor, consultant to the task force.

Fikre Workneh, M.D., formerly resident in psychiatry, University of Wisconsin, Madison, now Assistant Professor of Psychiatry, Haile Selassie University, Addis Ababa, Ethiopia, speaking on behalf of himself and his associates: Marjorie H. Klein, Ph.D., Assistant Professor, Department of Psychiatry and Psychiatric Institute, University of Wisconsin; Milton H. Miller, M.D.; Aris Alexander, Ph.D., Associate Professor, Department of Psychiatry, University of Wisconsin; and Kwo-hwa Tseng, M.D., Child Psychiatrist, Winnebago State Hospital, Oshkosh, Wis.

Eugene B. Brody, M.D., Professor and Chairman Department of Psychiatry, and Director, Institute of Psychiatry and Human Relations, University of Maryland, Baltimore, Md.

David J. Lewis, M.D., Professor, Division of Psychiatry, University of Calgary, Alberta, Canada, and Clinical Director, Department of Psychiatry, Foothills Hospital, Calgary.

Tsung-yi Lin, M.D., speaking on behalf of himself and of his associate, Mei-chen L. Lin, A.C.S.W., Social Work Supervisor, Children's Psychiatric Hospital, University of Michigan Medical Center.

Their papers are abstracted below.

An Introduction: Even Psychiatry Isn't Perfect

BY MILTON H. MILLER, M.D., AND ASSOCIATE

PSYCHIATRY IS PAINFULLY DISCOVERING another of its own neglected minorities, one now claiming a greater share of professional attention, resources, and understanding than it has currently been receiving. That minority is the group of foreign medical graduates (FMGs)—those training in North American residency programs and those who work in our psychiatric health care delivery systems. These physican colleagues are by no means a small minority. It has been reported that approximately one-third of all psychiatric residents in approved training centers are FMGs (1). Indeed, approximately ten percent of approved psychiatric training programs are staffed exclusively with foreign residents.

Less well counted than the psychiatric residents are foreign-trained doctors with varying levels of formal psychiatric experience who are employed in state mental hospitals and in hospitals and schools for the retarded. In one state psychiatric system, over 90 percent of physicians working in public mental hospitals are FMGs, many of whom have received little psychiatric training. Experience makes it clear that a substantial majority of all FMGs training and/or working in the United States and Canada will not return home; they will remain indefinitely in North America.

A 1971 AMA study concluded: "The major differential growth rate of the physician population over the general population in the United States has been due largely to the influx of foreign graduates. An additional input into the North American physician population comes as well from an estimated 3,000 native born North Americans who are presently studying in foreign medical schools" (2).

Buried within these large numbers are innumerable and enormously complex personal, organizational, national, and international problems. At the personal level, a good many—possibly most—recently arrived FMGs feel resentful as to the nature of their personal and professional destinies in North America. Many discover that a majority of their North American colleagues feel: "You should go home!" or "If you have decided to stay, you can't expect to have it as good as those of us who are native-born, or who came long ago, or who are well established." The kinds of limited medical licensure offered foreign graduates in many states reflects the ambivalent sentiments of the host country. In response, many FMGs feel deep resentment, others resignation; perhaps in some there develops a kind of identification with the aggressor, with consequent self-effacement and guilt. Many physicians coming from Asia and South America wonder: "Would things be better for me in North America if I were an immigrant from Europe?"

More broadly viewed, it is probable that the influx of foreign doctors into the various North American health

care systems, by seeming to fill job vacancies, has served to prevent the desperately needed national confrontation with the question of the adequacy and priorities of our health programs. We have imported doctors rather than allowing the expansion of medical and paramedical training. Thousands of young Americans and Canadians have been denied a medical education because it has seemed cheaper to import medical resources from overseas. Meanwhile, one can only barely comprehend the meaning of "brain drain" to those developing nations exporting doctors at a time when they are beginning to attend to the health care needs of their own people. These problems are interrelated, complex, and terribly important. They call for study and remedy.

However, simplistic solutions together with pious pronouncements about other people's responsibility to return home are of little value. Such reactions, fortunately uncommon, overlook the maze of complex "pull factors" toward industrialized nations and "push factors" away from nations turbulent in the transition from agrarian poverty. Ultimate solutions will require a review and change of existing national and state laws governing immigration and medical licensing policy, a study of hospital recruiting practices, a consideration of the limited positions in American medical schools, the development and more effective use of paramedical specialists in North America, and more imaginative efforts to attain an equal distribution of medical manpower. Furthermore, in the several instances of home countries that make little or no effort to retain their own physicians or to seek their return, a change in such national policies must be sought. And of course we who are the "established" North American physicians must recognize that the FMG now in the United States or Canada was offered a place to train and a place to stay, if he or she so chose.

Of immediate relevance to psychiatry, the Board of Trustees of APA last year appointed a Task Force on Foreign Medical Graduates, which is currently exploring possible steps that could be taken by the Association, its district branches, state commissioners of mental health, medical school departments of psychiatry, and the FMGs themselves.

Overall, the task force goal is both to increase the profession's awareness of and responsiveness to the special needs of physicians newly arrived from overseas and to increase psychiatry's ability to fully utilize the special talents of the gifted foreign medical colleagues in our midst.

The Foreign Medical Graduate: The Alienated Minority of Psychiatry

BY FIKRE WORKNEH, M.D., AND ASSOCIATES

WHAT IS IT LIKE to be an FMG studying or working in a North American hospital? This paper describes detailed interviews conducted with ten foreign-born physicians in various medical residency specialties at the University Hospitals in Madison, Wis. In addition, briefer discussions were held with ten other foreign physicians. We found—as have previous authors—that cross-cultural living and working is always more difficult than the casual observer would believe. This is as true of foreign doctors working or studying in the U.S. as it is of the younger graduate or undergraduate student.

A number of FMGs arrive in North America with definite English language deficiencies. They are often competent in reading and writing the language but deficient in conversational English. This creates difficulties in the early part of their sojourn both with their colleagues and with their patients. Some doctors vividly described the pain of being on night call the first day after arriving in a totally unfamiliar setting and with an untested ability in conversational and medical English. The names of even the most commonly used drugs vary from one country to another. And beyond language, the hurried and informal setting of the American hospital often leaves the FMG at a loss in trying to cope with conflicting values and interpersonal relationships.

The egalitarianism (or pseudo-egalitarianism) that is found in American medical training centers often proves quite puzzling to the FMG. The doctor-nurse "game" in the United States poses frequent problems for him. All the physicians interviewed spoke about the nurses' "level of dominance" compared to the nurses in their own country. While most were highly appreciative of the nurses' competence, there was frequent resentment of the status nurses expected. In many instances this caused an estrangement between the doctors and their nursing colleagues. The kind of feeling about peer relationships held by some FMGs is shared by foreign students in other fields, who also see American women as aggressive, domineering, and threatening.

An additional problem for some FMGs centers around the relative roles of doctor and patient. Many FMGs are high in the social hierarchy in their home countries. They are not used to being questioned by patients; in their home countries they are often held less generally accountable for their actions. By contrast, almost all FMGs whom we interviewed reported that most of their American patients are knowledgeable about their diseases and take an interest in discussing their situations. Some FMGs found the doctor-patient parity difficult to cope with. In several instances, the negative attitude of the foreign doctor had to do with his fear of the threat of a malpractice lawsuit. Talking with patients was, in the FMGs' eyes, somewhat dangerous.

Many foreign students, particularly those from developing nations, tend to attend classes in the host country but to do most of their living and enjoying only in the company of fellow nationals or other international students. Encounters with citizens of the host country are limited to occasional exchanges of pleasantries. They lead a life that is separated from the American culture.

The frequently restricted cultural adaptation of the wives of the FMGs, particularly those from developing

countries, is also important but has attracted very little attention. A number of these women neither work nor study; their lives are characterized by even greater loneliness, isolation, and frustration than that experienced by their husbands. Their activities, carried on without much encouragement, center solely around their husbands and their children (if they have any). For many foreign doctors, their wives' unhappiness reinforces their own social isolation and leads to many disappointments about cross-cultural living. Some work this out by accentuating their observance of the traditional ways of home. One resident who had lived with his family in the United States for two years revealed that his wife spoke no English and had abandoned earlier plans to learn. As a result she isolated herself from all social contacts, refusing invitations of house-staff wives and hardly moving out of the house except in the company of her husband during his occasional free weekend. Her husband was thinking of asking his mother-in-law to join them so that his wife would not be alone.

What are the responsibilities undertaken when one invites an FMG to work or train in a North American psychiatric institution? The implications of an answer encompass not only the doctor, his patients, and the institution involved, they leave in question the kind of total health system that fails to delineate and meet its responsibilities.

A Preventive Approach to the "Problem" of Foreign Medical Graduates

BY EUGENE B. BRODY, M.D.

ADMINISTRATORS AND HEALTH EDUCATORS in the donor nations are keenly aware that they reluctantly support the health systems of their more affluent neighbors. During my recent stay as a Pan American Health Organization-World Health Organization consultant at the University of the West Indies, I heard repeated discussions about the economic wisdom of maintaining a medical school that loses 40 to 60 percent of its graduates yearly to England, Canada, and the United States. The dean's office of that school estimated that the emigration of 40 physician-graduates per year represents an annual contribution of at least $960,000 to medical care elsewhere. Besides money, certain professional and personal costs are involved. The World Federation for Mental Health has explored the relevance of graduate training in psychiatry in the United States, Canada, and the United Kingdom for students from developing countries. Its conclusions, summarized by Beaubrun (3), were: 1) despite the general relevance of basic psychiatric concepts and methods, much that is taught in advanced industrial nations has little relevance for students from developing areas, and much of importance is omitted; and 2) students who received most of their training abroad either remained abroad or were misfits if they returned to their native countries.

The FMG in North America often cannot plan his future with the certainty of his American colleagues. His decision to remain in the United States or to return to his native land is often made only gradually and in piecemeal fashion. He is painfully aware of the hostility he may meet at home from professors who, feeling themselves rejected by his going abroad, may deny opportunities to him if he returns. He may feel guilty in the knowledge that his basic education expended the scarce resources of a country he is not going to serve. He is occasionally uncertain about the political climate of his home country, and is sensitive to its economic hazards. As Lin and associate have emphasized (see below), the most thoughtful realize that the usefulness of overseas psychiatric training is uncertain because of the low priority of psychiatry in the medical and public health programs of developing countries and the lack of interest of traditional psychiatric leadership in dynamic and community psychiatry.

Underlying the resistance to returning home are historical differences between emerging or postcolonial powers and nations that have long been politically autonomous and industrialized. The cumulative weight of traditional medical leadership—resistant to change—may be associated with a long-established small élite perched on the shoulders of an economically deprived, largely illiterate population mass; wealth inaccessible to taxation because of its concentration in a few hands or produced mainly by agriculture and mining based on cheap labor does not contribute to medical education or service.

A number of efforts have been made to reduce the "brain drain" at the source. One type of solution, reflecting changes in the political climate, is the imposition of governmental constraints. As Beaubrun noted, the older Caribbean practice of "the export of residents for training is now stigmatized as 'the Colonial method' " (3). The Commonwealth Caribbean Ministers of Health have agreed to give precedence for career advancement within the region to holders of the higher degrees from the University of the West Indies in preference to those with foreign qualifications.

Another approach has involved the participation of home-country educators and health administrators in planning overseas training. A notably successful example was that of the department of psychiatry at the University of Taiwan under the direction of Professor Tsung-yi Lin. This fits the suggestion, growing out of the World Federation for Mental Health seminars, that the first two years of graduate training in psychiatry should be accomplished in the home territory before a resident goes abroad for advanced work. This establishes his mature identification with his own professional community.

But the most basic step is yet to be taken. This is the formulation of internationally recognized standards of psychiatric education for facilities, programs, and the products of these programs. Without such standards it becomes extraordinarily difficult to develop educational experiences capable either of reducing the need of young

people to seek training abroad or of giving them the necessary base for successful advanced learning in foreign centers. We propose as a first step the establishment of an Inter-American Commission on Psychiatric Education. This could operate under the auspices of the Pan American Health Organization of WHO, with the collaboration of the Inter-American Council of Psychiatric Associations, the World Psychiatric Association, the World Federation for Mental Health, and other key international and national groups concerned with medical education. The initial function of the commission would be to promote the interchange of information and ideas concerning psychiatric education in the hemisphere; the next task would be to arrive at mutual agreement about international standards and guidelines; this step might ultimately (but not necessarily) lead to international accreditation of psychiatric training programs and certification of graduate specialists.

The Treatment of the Alienated by the Alienist

BY DAVID J. LEWIS, M.D.

FROM PERSONAL EXPERIENCE, we are all aware that foreign residents have passed through an ordeal of strangeness and alienation from their own country and from themselves; they have also felt at a distance from their patients. The difficulties are expressed in different ways, depending on the stage of acculturation of the foreign resident.

Initially the crush of culture differences, the strangeness within the place of employment, and the difficulties attending interpersonal contact interfere by slowing him down and making him very dependent on unit leadership. This is especially true in the larger mental hospitals where most FMGs take their training; such training is frequently, although not always, deficient.

Following the period of initial culture crush—which could extend from several weeks up to three years, with a mode of about six months—the resident begins to take hold and to form ideas, often oversimplified, of the task required of him.

Some residents remain at this primitivist stage. They prescribe medication and physical treatment with little concern for the patient's underlying problems throughout their professional careers. Often these careers are very remunerative. Others fortunately develop a fine sensitivity to our country. Yet others never manage to make good their hopes and either revert to other specialties or accept inadequate posts outside the profession.

It is rare, although not absolutely unknown, to find foreign medical graduates in high-prestige positions. They continue to be subject to discrimination and sometimes to scapegoating on the basis of the general stigma against the foreigner and also because of misunderstandings resulting from mild, culture-caused misdemeanors or misadventures. A high degree of communication between the FMGs and those responsible for their efforts as supervisors and teachers is required, otherwise these victims defect or are extruded, often over rather picayune incidents.

Those residents who have been able to make long-term adjustments have more than justified the efforts taken to guide and support their earlier years. Foreign residents learn quickly and effectively from teachers but are often puzzled by differences in orientation between instructors. Their learning would be enhanced if structure could be imparted to their natural adjustment process. It is often a long series of chances and "happenstances" that governs the development of their careers.

By contrast to the present policy of muddling through, an example can be pointed out. Practically all of the individuals who have utilized the Colombo Plan in Canada to secure their postgraduate education have returned home to work in their own countries. On the other hand, those who come to the United States and Canada on their own do so wastefully in terms of years spent, opportunities offered and utilized, and affect deployed. The present wasteful situation could be changed without too much difficulty. For example, the APA Task Force on Foreign Medical Graduates has suggested a three-pronged approach, beginning with the study of the foreign medical graduate in our midst and in his homeland, proceeding to the establishment of pilot educational programs in suitable centers in the United States, and culminating in the establishment of international training programs. This should bring to the field of international medical education a greater degree of certainty than has so far characterized it.

It is felt that interactions could be greatly enhanced by commitments between authorities in the country of origin (both medical and governmental), the foreign medical graduate himself, and the institution at which his training is to be obtained. It would also be necessary to involve a world organization such as WHO that might make information about resources and needs available to the groups mentioned above. Demonstration projects and consultant personnel to governments and to foreign training centers are also important. If definite commitments were made by home units to take back staff members and to maintain an interest in them throughout their foreign stay, I believe we would avoid the wastage of personnel as well as the dislocation and distraction of health resources. In a word, we would substitute structure for the present anomie.

The Psychiatric Educational Background of Foreign Medical Graduates

BY TSUNG-YI LIN, M.D., AND ASSOCIATE

THE FMGs FROM DEVELOPING NATIONS who are in the United States psychiatric system today differ greatly in

many respects from the foreign psychiatrists who migrated from Europe in the 1920s, 1930s and 1940s. The former do not carry with them the cultural prestige or professional expertise of the latter, who came as a rule as specialists and/or teachers, usually from major centers of learning. Furthermore, the European group belonged to the same cultural and scientific circle before and after their migration. This group identity and cohesion, coupled with the fact that the majority even belonged to the same school of psychiatry (that is, psychoanalysis), helped to promote their professional advancement in the new world, which was more or less ready to absorb their knowledge and skills.

As Torrey and Taylor (4) have pointed out, the accumulation of FMGs in our psychiatric system has been caused largely by the need to fill positions not wanted by American residents or psychiatrists. This need is filled by FMGs, conveniently imported from abroad as "cheap labor." The long-standing two-class system of psychiatric services has thus been further reinforced; FMGs are used as the scapegoats of the rather ineffective, wasteful public psychiatric system.

Still, in our view the problem of FMGs merits neither pessimism nor despair. A concerted and systematic effort from all concerned, based on a clear understanding and the acceptance of the reality, is what is needed; we have no doubt that a good beginning toward a solution will then be worked out. The reality is that FMGs are here to stay and perhaps in increasing numbers. If the present "brain drain" and the health care delivery system remain unaltered, their presence will be increasingly important to the survival of public psychiatric institutions in the United States.

A clear understanding of the specific needs of any trainee, judged from an objective and sympathetic assessment of his educational background, is basic to the formulation of a relevant and effective educational plan. This also applies to FMGs.

Let us take a closer look at some of the facts and statistics that constitute the basis for some of the concerns about the quality of the FMGs. The passing rate on the Education Council for Foreign Medical Graduates (ECFMG) examination in 1969 was 34.3 percent (5). This certainly was a poor record. But with all fairness to the ECFMG, the passing rate should not be used as an index of the quality of a particular medical school or the medical education of a specific nation. The ECFMG applicants are not a representative sample of the graduates of a school or of a nation. In addition, language facility plays an important role in the scoring, and thus candidates from non-English-speaking nations are handicapped.

The low rate of those passing the ECFMG in their countries of origin should not be taken as an indication of the "inferior" medical training of the foreign medical graduates currently receiving training in the United States or Canada. These trainees passed the test in spite of their different educational background, in spite of the language and cultural barriers, and in spite of unfamiliarity with the testing method. Therefore one can even claim that the FMGs in training in the United States should be considered as physicians of considerable quality and people of potential who merit attention and assistance.

We shall now discuss the psychiatric educational background of FMGs in developing nations on the basis of two fact-finding surveys made by WHO. WHO conducted two conferences on "The Place of Psychiatry in Medical Education": one in Agra, India, in 1968 for countries in the Southeast Asia region, the other in Alexandria, Egypt, in 1970 for countries in the East Mediterranean region. Ceylon, India, Thailand, Indonesia, Burma, and Afghanistan participated in the first meeting and Lebanon, Pakistan, the United Arab Republic, Sudan, Ethiopia, Iran, Jordan, Tunisia, Kuwait, Iraq, and Syria in the second. Their primary purpose was to review current practices of teaching psychiatry and to determine the appropriate role of psychiatry in medical education in the countries concerned. The major findings of the conferences (6, 7) may be summarized as follows:

1. Psychiatry was indeed a seriously neglected subject in most medical schools; a large number of the schools offered no teaching in psychiatry at all. The most common type of teaching took the form of poorly organized mental hospital visits, supplemented by a few lectures given by part-time teachers who usually were on the staff of psychiatric hospitals. Only in a very few medical schools—e.g., in Indonesia, Thailand, Lebanon, and Sudan—was psychiatry taught by full-time faculty members as a regular course that had some resemblance to courses in developed nations.

2. The content of teaching in most medical schools seldom went beyond the demonstration of various types of psychiatric disorders and their diagnostic labels. Students were rarely given sufficient practical clinical experience to learn basic diagnostic or therapeutic skills for dealing with mental patients.

3. Rarely was psychiatry taught jointly with other branches of clinical medicine or social and preventive medicine. The isolation of psychiatry from the rest of medical education was further reinforced by the geographic location of the psychiatric facilities: usually a far corner of the medical center or a distant psychiatric hospital.

4. The total number of hours of teaching given to psychiatry throughout the six years of the premedical and medical curricula, including behavioral sciences and clerkship, ranged from 16 to 230 hours, with an average of 76.7 hours.

5. Only in a small number of medical schools was psychiatry taught as an independent subject requiring examination. In most schools examination in psychiatry was given as part of medicine or another subject, or no examination was required.

6. National and institutional variations were noticed. For example, a few medical schools in Thailand and Indonesia were giving more emphasis to teaching psychiatry. This was brought about by a more enlightened leadership in medical education or the work of a devoted psychiatric leadership (or a combination) eager to de-

velop mental health programs to meet community needs.

7. The place of psychiatry in the medical curriculum generally reflected the position of mental health programs in the national health plan. This is well illustrated by the fact that not a single mention of "mental health" or "psychiatry" can be found in the book *Health and the Developing World* (8), which contains one of the best analyses of the health problems in developing nations as well as many excellent recommendations for their solutions.

8. A most depressing observation was that the overall situation regarding teaching psychiatry in the medical schools of these countries had not improved significantly since the publication of an important WHO document (9) on the subject in 1960; this was written primarily for developing nations to stimulate new developments in psychiatric education.

It is therefore hardly surprising that the FMGs, with such minimal previous psychiatric education, should encounter serious difficulties in learning psychiatry in a resident training program in the United States. The omnipresent problems of language and acculturation handicap them further and make them appear, in the first or even the second year, as "fools" or "useless clinicians" in the eyes of their colleagues or even patients. A recent report (1), however, presented a different picture. The completion rate of FMGs in residency training centers was approximately 80 percent, while that of all the residents was approximately 82 percent. The figure for FMGs should be regarded as very praiseworthy, considering the problems facing them. Their courage, determination, and capacity for learning cannot be underestimated, although many other factors also contributed to their high rate of completion, such as financial reasons, immigration requirements, or job opportunities.

The success rate of FMGs in the American Board of Psychiatry and Neurology examination is reported as low (10). This finding can be looked at from various points of view. Again, one should not overlook an important point: a number of FMGs have succeeded in passing the Board examination in spite of their linguistic, educational, and cultural handicaps and in spite of their unsatisfactory psychiatric training (the majority of them take their residency training in state hospital systems, which are in general inferior to university or medical centers). Kolb was right in concluding that "there should be a greater equality in training opportunities for those who come here from abroad" (11).

If an FMG is placed in a state hospital that has no active treatment or rehabilitation programs, the hospital atmosphere and his clinical experiences will probably reinforce his bias and harden his inferiority complex as a "second-rate" physician. This will certainly affect his motivation for learning. If he is accepted as a resident in a university or medical center training program, the clinical training, emphasizing dynamic or social psychiatry, may be too overwhelming intellectually or psychologically (or both) unless he is exceptionally bright, articulate, flexible, hardworking, and reasonably aggressive. Often one finds in such settings a few FMGs drifting to laboratories or engaging in nonclinical activities. It is obvious that this kind of bias should be recognized and handled properly at an early stage in the training of FMGs. This also suggests the importance of American educators and administrators becoming aware of such problems and developing sympathetic attitudes and skills to handle them.

It is also evident that something must be done to help developing nations start vigorous mental health services to meet their mental health needs. As Waggoner stated, "The United States should accept the challenge of assisting other nations in developing their psychiatric programs" (12). There is no better or more effective way to do this than to assist these nations in acquiring a core of able, farsighted, and dedicated trained personnel as leaders for developing their mental health programs. A few shining examples of success are witness to the value of establishing psychiatric centers of excellence in the developing nations through well-planned, long-term international cooperation. Examples include the Taiwan-Harvard (Boston) model, the Jamaica-Edinburgh model, and the Malaysia-University of Washington (Seattle) model, among others. The APA Task Force on Foreign Medical Graduates also plans to initiate more such programs and to obtain the cooperation of the World Psychiatric Association, the World Federation for Mental Health, and WHO.

The sum and substance of what we have tried to decipher from the published and unpublished information is that the FMGs currently in the U.S. psychiatric system deserve attention and assistance in their professional growth. Although there may be deficiencies in their backgrounds, the picture is more favorable than commonly perceived.

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DISCUSSIONS

THE DISCUSSION WAS OPENED by *Dr. Leonard Ganser*, Director of Mental Health for Wisconsin. He observed: "I have always been puzzled about our tendency to feel that it is we who are extending the privilege. The FMG who comes to us is much more often than not a gifted, ambitious person who brings many needed skills. We allow him to come, thereby extending a privilege. But if an American decides to work overseas, we feel: 'How lucky they are to receive him. How gracious of him to offer them the privilege of his presence.' "

Dr. Bernard Holland, Professor and Chairman of the Department of Psychiatry, Emory University, Atlanta, Ga., described as one of the basic ingredients in the picture "the many-year unwillingness of the United States to adequately pay for the medical education and advanced training of its own citizens. If we were obliged to recompense foreign countries the 30,000 or 40,000 dollars necessary to train the FMG who leaves his home country to come to the United States, it would be a more honest transaction. And such payment would bring home to Congress the fact that other countries are now paying the bill for a good part of our health care."

Dr. Jaime Smith e Incas, practicing psychiatrist in Columbus, Ohio, suggested: "It is simply good mental health for those responsible for health care programs to demonstrate not only remote awareness of the needs of FMGs but to initiate appropriate actions to look after the mental health of all those who work in the system. In this respect, there has often been a gross neglect of the feelings and attitudes and the need for a sense of well-being of the FMG. Yet the FMG is often very important in the operation of the health care system." He felt that the place of the FMGs should be acknowledged and dealt with, contrasting this with the present tendency to ignore and overlook their presence while using their skills.

Dr. Walter Shervington, Director of the Training Branch at NIMH, compared the current meeting with the meeting of the first Black Caucus of psychiatrists at an earlier APA meeting in Miami Beach. He felt that in many respects, the contemporary problems of FMGs were not without racial implications: "Based on past performances, a suspicious person might wonder whether the status of a profession of white and established doctors would be enhanced by a group of second-class doctors. And if so, that suspicious person might wonder how much effort the established doctors would make in changing the status quo."

Dr. Joel S. Steinberg, Assistant Professor of Psychiatry at Case-Western Reserve, Cleveland, Ohio, described his evolution in thinking about FMGs:

> Initially I was interested in the problem of the FMG because of the great importance of communicative skills in psychiatry. In my experience as a moderately skilled bilingual internist, I found myself at sea with many patients—not because I could not understand what they were saying, or because they couldn't understand what I was asking, but because, despite the adequate exchange of information, I often had difficulty in deciding what the exchanged information meant. It seemed to be more an internal problem—although the exchange appeared to be adequate content-wise, it was superficial and lacking the full-bodied information exchanged in English. I assume that were I truly bilingual, this apparent difficulty would not be manifest.
>
> My initial bias, then, as I joined the Task Force on Foreign Medical Graduates was that the fewer FMGs practicing in this country, the better for all parties concerned. This attitude would not solve the problems of those FMGs who are already here, nor their patients, nor would it help resolve our health manpower shortage. I learned that the FMG has many things to offer us—his energy, motivation, upwardboundness, his vision of us as an outsider, and other attributes. In short, he brings to us many of the advantages that immigrants have typically brought to America.

Dr. Carl H. Fellner, Professor of Psychiatry at the University of Washington, Seattle, described differences between the FMG who declares himself as a foreign student here as a guest for a limited time and the foreign student who declares himself as having come to stay:

> There is considerably more curiosity and interest toward the guest, a willingness to tolerate his being different and even to explore some of these differences with little prejudice. There is a considerable tolerance and acceptance of his or her deficiencies in knowledge, be they scientific or cultural or social. Often a good deal of curiosity is expressed about the guest's home country, his family, his society, his religious beliefs, his culture. Now all this changes quite radically as soon as the FMG has declared himself as an aspirant to becoming a permanent member of the host country, a permanent member of the professional group, the society, the town. His being different in so many ways no longer evokes sympathy or respect. His explanations and illustrations of the differences in his background, feelings, and opinions is in most instances met with a demand to discard these and to adhere to the standards of this country, this society, this group. He must, as has been pointed out by so many of the previous speakers, show proof that he is better, tries harder, gives more, and asks for less than the native colleague, neighbor, teacher, friend. These are very important matters that need in some way to be taken into consideration in devising a training program for the FMG.

Coping with Problems: Attitudes Toward Children Who Set Fires

BY CAROLYN N. WINGET, M.A., AND ROY M. WHITMAN, M.D.

As part of an environmental health survey, 300 urban adults were asked how they would deal with a child who set fires. Respondents who were young, of upper socioeconomic status, and with numerous interpersonal relationships and low degrees of alienation most frequently gave positive-constructive responses indicating the use of outside resources. However, only about one-third specified mental health professionals. The authors discuss the implications of these findings in terms of improved orientation of representatives of the official community as well as in decentralized and more easily accessible mental health centers.

AUTHORITIES IN MENTAL HEALTH view repetitive fire setting by children as a severe behavioral symptom requiring professional help. There is a modest literature on the etiology and intrapsychic dynamics of this symptom. Considerably less information is available about how the potential consumer of mental health services perceives the problem of fire setting by children or how he conceptualizes ways of coping with it. The purpose of this paper is to report upon one aspect of an investigation in which hypothetical mental health problems were presented to a stratified random sample of adults residing in a large midwestern city. Although the present study addresses itself to representative attitudes toward dealing with fire setting as one serious psychiatric problem of childhood, the findings may be generalized to larger issues in community mental health and the concomitant problems of health care delivery.

The psychiatric stance on the delivery of health care has essentially been derived from the traditional medical model. Two aspects of this model are especially pertinent. One has to do with the fact that effective preventive medicine, as illustrated by vaccines against smallpox and polio, for instance, has only become feasible when the problem has been defined and accepted as a difficulty amenable to solution. The other implication of the medical model is that the source of medical or psychiatric help is usually centrally located in medical office buildings or clinics and the potential patient must have not only knowledge of these sites, but also access to them in order to apply for assistance to alleviate his distress. The urgent need for continuing efforts in the definition and dissemination of information on mental health problems and for the exploration of different methods for delivering health care to people is illustrated in the data presented in this paper.

FIRE SETTING AS A PROBLEM IN CHILDREN

A recent article on this subject starts characteristically: "Firesetting in children is a serious symptom and is considered by many to be a valid reason for emergency consultation" (1). A survey of the literature on fire setting reveals that most of the articles deal with the phenomenology of the symptom, its symbolic meaning, its psychoanalytic dynamics, and some aspects of the treatment process. By and large, the child is referred for treatment by the school or the court, which, rather than the parents, sees the fire setting as a serious presenting symptom.

In her comprehensive study, Yarnell (2) reported that most earlier writers used as their starting points Freud's observations about man's need to gain power over nature by acquiring power over fire (3). As a consequence, the libidinal-sexual components of fire setting were emphasized and the important aggressive components of this behavior were often de-emphasized. Significantly, fire setting was rarely the complaint that brought a child to the attention of psychiatrists; rather, it was asocial or truant types of behavior other than fire setting, and the latter symptom was noted as an additional complaint. Two recent reports (1, 4) tend to confirm this finding. In addition, almost all studies since Yarnell's have emphasized that fire-setting behavior is multidetermined and that the aggressive element seems to be more prominent than the libidinal element (5–8).

There is a certain parallelism here with a current problem that our society is now facing and coping with poorly—that is, the handling of aggressive impulses, particularly on the part of minority and youthful populations—for the symptom of fire setting has both an internal psychodynamic reference and a sociological group reference. The rage and uncontrolled aggressive hyperactivity that lead to fire-setting behavior in children are also to be seen in the way fire has been used as a form of

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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This work was supported in part by a grant from Rollman Psychiatric Institute, Ohio Bureau of Research and Training, Division of Mental Health.

The authors wish to thank Drs. F.T. Kapp and Goldine C. Gleser for their assistance in the preparation of this paper.

protest by blacks and the radical left. It is not only destructive but vivid and dramatic in its intensity.

METHOD

Mental health questions were included in a general environmental health survey that was administered to a group of 300 respondents randomly selected to be broadly representative of the population of Cincinnati, Ohio. Details of this sample have been reported previously (9). The questions in the mental health portion of the survey were worded so as to require a cognitive solution to an emotional issue. Earlier national studies (10–12) focused on reality questions of etiology and sources of unhappiness, worry, and maladjustment, as well as actual ways in which people had coped with such problems.

Questions in this study were designed to approach these issues more obliquely, by posing hypothetical questions on anxiety, depression, suicidal tendencies, and fire setting. It was felt that some defensiveness on the part of the respondent could thus be circumvented and that the responses could provide an index of the extent to which mental health problems were recognized, as well as indirectly furnishing data on how knowledgeable various strata of the population were with regard to community mental health resources.

The environmental health survey questionnaire was a lengthy one, and the mental health questions were embedded at a point in the interview at which sufficient time had elapsed for some degree of rapport and mutual trust to have been established between interviewer and respondent. All interviews were conducted in the homes of the respondents by interviewers of the same race as the subject. The question on fire setting provided a dramatic problem to respondents and was chosen for its impelling quality to stimulate remedial action.

RESULTS

The specific question posed was: "If you had a child who repeatedly set fires, what would you do about it?" The key words are "repeatedly" and "fires," coupled with a challenge to solve the problem. Since this was an open-ended question, which the respondent might deal with in any way he chose, the range of responses was great. The most frequent response was "See a psychiatrist," which was given by one out of five respondents. About 15 percent of those in the survey sample said that they would seek help from a family doctor or a clinic doctor; an equal proportion said that they would not know what to do or felt they couldn't answer the question. References to clergy as a source of help had the lowest response frequency (less than one percent).

Responses were further categorized as follows:

1. *Positive or constructive responses.* This included any response that could possibly lead to suitable professional referral, including all references to psychiatrists, doctors, clinics, or other professional, community, or neighborhood resources if the reply was couched in terms of helping the child.

2. *Helpless or hostile responses.* These were responses that were directly punitive ("I'd burn him so he'd know better"), indirectly or covertly punitive ("I'd call in a policeman to give him a good scare"), and ambivalent ("I'd give him a good whipping and talk to my minister about it"). Also included here were "I don't know" or "I can't answer that" replies, on the assumption that the lack of responsiveness implied a lack of knowledge of how to deal with the problem.

3. *Controlling or neutral responses.* These consisted of references to police, fire fighters, institutionalization in a state hospital, or court commitment, unless given in a context of hostility and punitiveness. This class of responses also included control within the home ("hiding the matches" or "keeping an eye on him").

The results of this coding are given in the column headings of table 1. Analysis of the grouped data as summarized in table 1 revealed that a number of demographic and behavioral variables were significantly related to response patterns.[1]

1. *Race.* Negative responses were more frequent among whites (38 percent) than blacks (19 percent). Compared with whites, almost twice as many of the blacks gave responses that were coded as neutral.

2. *Age.* Almost 80 percent of those in the 21–34 age group gave positive-constructive responses. This proportion declined steadily for each age group to less than 25 percent of those 65 years of age and older.

3. *Socioeconomic status.* The higher the class status, the more likely that responses would be positive (68 percent) and the less likely that they would be neutral (four percent).

4. *Anomie.* Those who indicated a low degree of alienation from societal values and norms, as measured by a ten-item index (13), reported, proportionately, the most frequent positive coping methods and the least frequent negative responses.

5. *Affiliative behavior.* There was a consistent and significant direct relationship between the amount of self-reported interchange in formal and informal interpersonal relationships and the proportion of constructive coping responses.

6. *Sex and marital status.* These were not statistically significant factors, although there was a tendency for more of the women and more of the married respondents to respond with constructive ways of coping.

DISCUSSION

The main focus of this study has been an examination of the ways in which various segments of the general population might cope with a serious childhood psychiatric symptom. There are encouraging aspects to the findings.

[1] Detailed basic data may be obtained from the authors. The chi-square test with the appropriate degrees of freedom was used to evaluate statistical significance.

TABLE 1
Summary of Statistical Analysis of Grouped Data by Demographic and Behavioral Variables (N=300)

Variable	Responses to Question on Fire Setting						Significance
	Positive-Constructive		Helpless-Hostile		Neutral-Controlling		
	Number	Percent	Number	Percent	Number	Percent	
Race							p<.001
Black	56	57.1	19	19.4	23	23.5	
White	107	53.0	77	38.1	18	8.9	
Sex							n.s.
Male	53	50.0	37	34.9	16	15.1	
Female	110	56.7	59	30.4	25	12.9	
Age							p<.001
21–34	67	79.8	13	15.4	4	4.8	
35–49	55	63.9	22	25.6	9	10.5	
50–64	26	40.0	22	33.8	17	26.2	
65 and older	15	23.1	39	60.0	11	16.9	
Marital status*							n.s.
Married	104	61.6	49	29.0	16	9.5	
Single	21	53.8	12	30.8	6	15.4	
Separated	9	45.0	6	30.0	5	25.0	
Widowed	20	43.5	17	37.0	9	19.5	
Divorced	9	39.1	9	39.1	5	21.7	
Socioeconomic status							p<.001
Lower	25	32.1	26	33.4	27	34.6	
Lower middle	76	58.0	45	34.3	10	7.7	
Upper middle	62	68.1	25	27.5	4	4.4	
Anomie (alienation)							p<.001
Low	73	67.6	23	21.3	12	11.1	
Average	38	44.8	41	48.2	6	7.1	
High	52	48.6	32	29.9	23	21.5	
Affiliative behavior							p<.001
High	40	66.7	15	25.0	5	8.4	
Average	84	62.2	34	25.2	17	12.6	
Low	39	37.1	47	44.8	19	18.1	
Total	163	54.3	96	32.0	41	13.7	

*Since three respondents refused to divulge their marital status, the total number for this analysis is 297 rather than 300.

If one combines all forms of outside resources named by respondents, over half of those sampled would seek some type of outside help; this is indicative of the high recognition of the seriousness of the problem posed by a child who repeatedly sets fires.

A less rosy picture emerges from a more realistic appraisal of how respondents themselves identified the outside help they would seek. If one thinks of psychiatrists and other professionals in the mental health field as the most constructive type of resource, about one in three persons would seek an effective solution. To the extent that police and other representatives of the official community are looked to for help and are not oriented to their roles in this referral system, the likelihood of constructive outcome is seriously diminished. The parallel with suicide prevention centers is quite striking. Essentially, those who are in greatest need are those least likely to be reached or to reach out.

We found reason to believe that the continuing efforts in mental health education have been successful. In particular, the highly significant findings with regard to the relationship of age to type of response should be encouraging to those who have worked at many levels of our society to broaden understanding of mental health concepts. Almost 80 percent of those under age 35 mentioned a constructive resource or method to be used for coping with a child who sets fires.

The finding of greater constructive effort by those with upper-middle-class status is consistent with what might be expected for those with more years of schooling, greater income, and higher occupational status. Two-thirds of the lower-class subjects gave responses indicative of outright hostility, helplessness implicit in a "don't know" response, and the probably ineffectual responses that we coded as "neutral." It seems likely that this group needs much more from society, both in terms of helping to define the dimensions of mental health problems and in the institutional changes that would make health care delivery more easily accessible both geographically and bureaucratically.

The area of greatest racial difference was that, proportionately, almost twice as many whites as blacks gave responses in the negative category (hostile or helpless). This would fit with the theory of some militant blacks who have asserted that blacks are kinder, more generous, and less punitive than whites. An alternative explanation may

be that blacks have a greater tolerance for deviant behavior than whites.

We have used the term "anomie" in Srole's sense to mean a feeling of alienation, lack of integration, or inharmonious relationship to society. Our finding that both anomie and affiliative behavior are significantly related to the types of responses to the fire-setting question is consistent with previous research indicating a negative relationship between measures of anomie and socioeconomic class (14) and between anomie and measures of social interaction and social isolation (15, 16). Langner and Michael (12) also reported higher mental health risks among those who were poor in interpersonal affiliations.

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Migration and Psychopathology of Eskimo Women

BY JOSEPH D. BLOOM, M.D.

Various epidemiological studies have noted the high rate of migration of Eskimo women from their native villages into cities and large rural towns and also their higher rate of psychopathology compared to Eskimo men. The author explores both trends and correlates them, theorizing that the Eskimo woman's dissatisfaction with her low standing in the native culture provides impetus for migration in the hope of marrying a nonnative man. This uprooting, along with unsatisfactory integration into the new culture, may lead to increased psychopathology.

THE PURPOSE OF THIS PAPER is to examine certain possible differences between Eskimo men and women in terms of migration and manifest psychopathology. Available evidence seems to point to Eskimo women migrating toward urban areas more frequently than men and showing a greater number of psychopathological symptoms. I will offer explanations for and explore the implications of these statements in light of traditional Eskimo culture and personality development.

PHYSICAL MIGRATION

General Patterns

Little doubt exists that there is a general migration of young adults away from the smaller villages in rural Alaska. This can be shown by the relative absence of young adults in the smaller villages. Hippler (1) has shown that in a composite group of small Eskimo villages in northwest Alaska there were fewer individuals in the group ranging in age from 24 to 29 years than in the group ranging in age from 40 to 44. Although there may be many reasons for this finding (including a possible differential mortality pattern), one explanation would certainly be migration out of the villages.

Although the population of small villages has been shown to be persisting and even growing (2), there is clear evidence that the Eskimo population is also growing in the larger rural towns such as Bethel, Barrow, Kotzebue, and Nome and in the urban centers such as Anchorage and Fairbanks. Further, it is clear from the age distribution of village populations that the majority are composed of dependent children. For example. Hooper Bay, a Bering Sea village, had a population in 1966 of 535 people, of whom 52.9 percent were under 14 years of age, 19.5 percent were between ages 15 and 24, only 16.6 percent were between ages 25 and 44, and only 11 percent were over age 45 (3).

The large rural towns are thus growing both from their own population base and from substantial numbers of migrants from the villages. The reasons most often cited for people coming to these towns is desire for cash employment (although precious little is to be had) and for goods and services such as schools and hospitals, and the lure and excitement of living in a larger town. This latter reason seems to be particularly important to young adults (4,5).

Hippler (6) described the growth of the towns of Barrow and Kotzebue as representing the coalescence of smaller villages that are now almost uninhabited, particularly in the Barrow area. He also described a high rate of migration out of these large rural towns and into the urban centers; this is balanced, however, by migration into them and a high birth rate. I have stated (7) that these large rural towns have many characteristics of "socio-cultural disorganization"(8). One factor of this condition, as defined by Murphy, is "rapid socio-cultural change" (9) with extensive migration. While it is debatable whether or not the phrase "socio-cultural disorganization" can be applied to Barrow or Kotzebue, many of its descriptive features seem to be present.

Thus the general pattern of migration includes a flow of people, generally young adults and families, away from small villages and into larger rural towns or cities. On the other hand the small villages are maintaining their population and even growing because of the recent dramatic population explosion (10), which has produced a situation in which in the late 1960s close to 50 percent of the total Eskimo population was under the age of 14.

Differences Between Sexes in Physical Migration

We are beginning to develop a picture that points to a difference in the physical migration pattern between Eskimo men and women. Most of the evidence is not conclusive, however, and the ambiguity highlights the need for more definitive studies of this aspect of cross-cultural change in Alaska (6).

Hippler, in citing magistrates' records of the town of Barrow(6), stated that there is a "continuous migration of women out of Barrow." He saw the population dynamics as made up of the migration of families from the villages into the town and an extremely high birth rate, balanced

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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by the migration—predominantly of women—out of the town.

I reviewed 105 native Alaskan patients (7) who were referred for psychiatric evaluation and found several important differences between the men and women in the sample, one of which was a statistically significant difference between male and female migration patterns. The majority of those studied were either from large rural towns like Bethel, Barrow, or Kotzebue or from urban centers like Anchorage. A greater number of women than men had migrated to these places from the outlying villages. While the sample reflects only those people referred to a psychiatrist, it may reflect trends in the general population as well.

Despite its small sample, the recent demographic study by Milan (11) of the Arctic coast village Wainwright represents one of the few that actually measured the degree of migration out of a single village. Of those villagers who were older than 20, a greater number of women than men permanently migrated out of the village; 24 percent of the women who were older than 20 married white men and are residing in Barrow or other places. The men have either remained in the village or have demonstrated a pattern of "circular migration" (12) in which they leave the village for a period of time and then return. Milan concluded that the "Wainwright women have higher physical and social mobility than men." However, he made the assumption, which should be questioned, that these women are adequately prepared for "life elsewhere" by the years they have spent in boarding schools.

In studying the changes in population structure in several Aleutian villages, Jones (13) stated that the emigration of Aleut women who range in age from 20 to 40 years is greater than that of men. In the 1960s in "Unalaska, Atka, and Akutan, there were respectively 2.7, 1.4, and 1.2" as many female emigrants as male emigrants. This higher incidence of female emigration may be due, she speculated, to the increased possibility of these women marrying white men if they are not living in a small village.

Thus there is some evidence, however small, that Eskimo and Aleut women are migrating at a higher rate from the villages to the larger rural towns and cities and that one factor related to such migration is the possibility of marriage to nonnative men.

Differences Between Sexes in Psychopathology

In this section I will examine current evidence pointing to differential rates of psychopathology by sex in the Eskimo population. It should be understood that there have only been a few studies that have attempted to measure the true prevalence of mental disorders in specific groups of Northern peoples. Most of the other studies that I will be citing deal only indirectly with psychopathology as it exists in the general population and by sex.

Historically it is of interest to note that the early descriptions of the so-called culture-specific disorder "Pibloktoq" pointed to a definitely higher prevalence in women. For example, Brill (14), citing the work of Admiral Peary and Donald MacMillan, stated that "the disease was almost exclusively confined to the female sex." Peary, in his 25 years in the Arctic, said he had seen only one man with what might have been labeled as Pibloktoq. He further reported that of the 20 women aboard the ship *Roosevelt* eight had suffered from the disorder at various times during the voyage. Gussow (15), in a more comprehensive study of the Pibloktoq syndrome, found a greater number of cases in men than Brill did but still found a definite preponderance in women; of the 14 descriptions of the syndrome in his study, ten were of women and four were of men. There is speculation in both papers regarding the possible dynamic implications of the sexual differences of Pibloktoq sufferers.

Murphy and Leighton (16) described a general similarity between Pibloktoq in the central and eastern Arctic and what was called "amurakh" in the Siberian Arctic. Referring to an article written in 1914 about Siberian Eskimos, they cite this syndrome as predominantly affecting women.

Because of the small number of cases and the lack of recent descriptions, these accounts of culture-specific disorders may be little more than historical curiosities at the present time. However, the preponderance of cases affecting women may provide clues to some of the underlying factors in Eskimo culture that influence the woman's role.

More recent attempts at epidemiologic work have been meager and carried out only in small villages in northern and western Alaska. I am referring to the work of Chance, Hughes, and Murphy. Each used different methods to measure the signs of emotional disorder. Other authors have touched on epidemiologic considerations but only tangentially.

Chance and associates (17–20), in studying the process of cultural changes in the northern Alaska village of Kaktovik, used a modified version of the Cornell Medical Index (CMI) to measure the rates of emotional disturbance in the village population and found that the women had significantly higher scores than the men, indicating greater emotional disturbance. In one paper (17) Chance and Forster compared the scores of the Eskimo men and women with results they obtained using the CMI in various settings in New York City; they found that Kaktovik men as a group most closely resembled a random sample of New York men, while the Kaktovik women resembled a group of women either hospitalized with a diagnosis of neurosis or being treated in psychiatric outpatient facilities.

Hughes (21) studied the process of cultural transition in the village of "Sivokak" on St. Lawrence Island during the year 1955–1956. As part of the overall project, which was an attempt to study changes in the village between 1940 and 1955, Murphy and associates, using a modified version of the Health Opinion Survey, undertook a small epidemiologic survey of the village population (16, 22, 23). They found that 26 percent of the adult population had psychoneurotic symptoms and that almost two times as many women had these as men. Further, in a group ranging in age from 21 to 40 twice as many women as men had these symptoms to such a de-

gree that they were considered psychiatric cases.

In one study (7), I also found several areas of differences between women and men in the group studied. The sample primarily reflected people living in large rural towns. In addition to having different migration patterns, a greater number of women were referred for psychiatric attention (63 percent women as opposed to 39 percent men). Generally the women were younger, had less stable occupations, and were involved in more crises at the time of referral. They presented a different diagnostic pattern than the men, the women having more diagnoses of neurosis and character disorder and the men having more psychosis.

Within the confines of the limited research data available it seems possible that in certain circumstances Eskimo women demonstrate higher rates of psychopathology than Eskimo men. The two epidemiological studies cited (that by Murphy and Leighton [16] and that by Chance [19]) were done in small villages. Such studies have not been undertaken in the large rural towns or cities so that comparisons of rates of psychopathology and diagnostic patterns are only matters of speculation at this time.

DISCUSSION

In this paper I have pointed out that:

1. There has been an unparalleled population explosion among the peoples of the North within the past 20 years.
2. There is a general redistribution of young adults away from the smaller villages and into larger rural towns and urban centers. The population of the smaller villages is predominantly made up of dependent children.
3. Within this population redistribution, women more than men seem to be migrating at a higher rate away from the small villages and into rural towns and more urban environments.
4. Eskimo women seem to have higher rates of mental disorder, as measured in the population of the two small villages cited here.

Of these four points the first two are generally acknowledged to be true. The second two highlight a difference by sex in both physical migration and psychopathology. These points suggest two questions: 1) If these data reflect an accurate picture, what factors might be involved in producing these phenomena in Eskimo women? and 2) Is there a relationship between psychopathology and physical migration?

One possible formulation of the data would be that there is evidence that the differences in psychopathology described may reflect an inherent bias in Eskimo culture that places more stress and conflict on women than on men. Parker (24), in an attempt to correlate Eskimo psychopathology (in particular, hysterical behavior) with personality development, stated that the "woman's role carried with it more disabilities and less prestige than that of men"—that the female role carried with it relatively great psychological deprivation.

Lubart (25), working in the MacKenzie Delta area of Canada, carried these points a great deal farther, feeling that because of the pressures of cross-cultural change certain underlying negative factors in traditional Eskimo society are now coming to the surface. He described the following features of traditional Eskimo society as constituting the underlying "foci of tension": "1) male dominance, inflation of the male ego and depreciation of the female; 2) female resentment of the male and of the female role; [and] 3) impounding of hostile and competitive impulses" (25). With outside influences and new opportunities for change, these underlying problem areas surface and may threaten to dominate Eskimo culture. The area of impounding hostile impulses, recently described by Briggs (26), has especially important implications in that resolving conflict on an open basis may be difficult to accomplish. This inability to deal openly with hostility may constitute another important stimulus for migration.

Lubart (27) stated that the "female's rejection of her old role has become a major factor in the potential breakdown of Eskimo society." This has to be taken one step farther in that it seems that the woman who is rejecting old roles still carries with her part of the negative self-image that was important in the psychological integrity of the traditional Eskimo culture. The higher rates of psychopathology observed in the two studies described may be related to these descriptions of traditional Eskimo society.

With these views of Eskimo society in mind the stage may now be set for the reasons behind migration. Using Brody's description (12), dissatisfaction with the "donor culture" would lead to an increased desire for migration. We are here postulating that the Eskimo has an internal desire for change. This seems to be complemented by the importance of the Eskimo woman in the sexual economics of the North, where nonnative men often migrate or where they are stationed away from their own women. The "receptor culture" in the North thus needs women, and the desire for migration may be brought to reality with the Eskimo woman serving as the sexual object for the non-Eskimo man. These unions between native women and nonnative men are often based on almost movie-like romanticism and I have observed that they often end in separation, depression, and suicide attempts. These latter clinical events are most often associated with abuse of alcohol and usually occur in the larger rural towns and cities. Thus the women who are suffering from confused identity in their rejection of former roles fail in achieving a new sense of identity in the larger villages and cities.

It is interesting to note that the state and federal agencies whose "mission" it is to work with Alaskan Indians and Eskimos often encourage migration by their policies, be they in relation to health care, education, or employment. It is only in retrospect that some of the unplanned negative consequences of these policies come to light. One of my contentions is that a more subtle awareness of the traditional culture might mitigate these negative consequences. This requires a translation of cultural awareness into public policy—a difficult task if we look

at past experience with programs.

This brings us to the last point—the migration process itself. Fried (28) viewed migration as a crisis, calling it a "crisis of transition." As with any other crisis it carries implications for subsequent strengthening of character or development of psychopathology. An important determinant here is the receptivity of the new environment to the migrant. When an Eskimo moves from a small village to a rural town or city, significant changes occur. He moves from a place where his own people are the majority group to an environment where the resident population of outsiders is in control of the major institutions and where prejudice and stereotyping is often the rule. In short, the new environments do not welcome the Eskimo migrant, and the results of this often contribute to the development of psychopathology.

CONCLUSIONS

In light of the material presented in this paper we may postulate that:

1. Eskimo women in traditional Eskimo culture occupy a position of lower status than men. In the current period of cross-cultural conflict this is expressed in terms of their greater psychological conflict, with possibly higher rates of psychopathology.
2. Dissatisfaction with the traditional or "donor" culture, along with increasing contact with outside culture, leads to desire for change.
3. Due to increased opportunities for migration, especially as sexual objects, Eskimo women leave the villages at higher rates than do Eskimo men.
4. The crisis of migration itself, often coupled with failure of the interpersonal relationship that led to it, cause greatly heightened conflict and, theoretically, increased and more severe psychopathology.
5. These factors lead to severe problems of adjustment within the environment of the larger rural towns and urban centers.
6. The reciprocal effects on men would be expected to be severe.

The model suggested here must be tested. Urban studies are urgently needed for confirmation or rebuttal, and one hopes they will ultimately influence programs.

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Hostility and Depression Associated with Suicide Attempts

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Hostility and depression are important factors associated with suicide attempts. Efforts to determine their respective importance, however, have been hindered because they are correlated to some extent with each other and with age and sex. The authors compared 29 acutely depressed women and 29 matched suicide attempters. Manifest hostility emerged as an important distinguishing characteristic of the suicide attempters, who had pervasive and overtly hostile relationships, a poor long-term work history, antisocial behavior, and were demanding and hostile during psychiatric interview. This contrasted with the depressives, who were compliant at interview. The theoretical and clinical implications of these findings are discussed.

THERE IS CONSIDERABLE OVERLAP in the social and personal characteristics of persons who make suicide attempts and persons who are clinically depressed. Suicide attempters are usually depressed (1, 2), and depressed patients are often suicidal (3). Difficulty in regulating and expressing hostility is another characteristic common to depressives and to suicide attempters. Those who attempt suicide, as contrasted with those who complete it, tend to be young, single, or divorced women with problematic and hostile interpersonal relations (4–6), characteristics similar to those of overtly hostile depressives, who also tend to be young women (7, 8).

Because of the similarities in age and sex between depressives and suicide attempters, it has been difficult to separate the relative contribution that hostility and depression each has made in suicide attempts. The need to separate these four variables—age, sex, depressive mood, and hostility—in studies of suicide was highlighted by the findings of a recent study of depressed patients, some of whom subsequently made suicide attempts (9). A depressed cohort was followed up ten months after the index episode, and those depressed patients who made suicidal attempts were compared retrospectively with depressives who did not make suicidal attempts. Important and potentially predictive differences between the two groups relating to the expression of hostility were found. However, highly significant differences in age and sex between the groups that may have confounded the findings were also found.

The current study controlled for the possible confounding differences between depressives and suicide attempters. Two groups of patients who were similar in degree of clinical depression, age, sex, race, and social class but who differed in having made a recent suicidal attempt were compared in an attempt to answer the following question: Is the overt expression of hostility in association with depression an independent factor that is predictive of a suicide attempt not subsumed by correlations with age or sex?

METHOD [1]

The Sample

The research sample consisted of 58 subjects who were divided into two groups, 29 depressives and 29 suicide attempters matched for sex, age, social class, race, and marital status. These 58 subjects were selected from two

This study was part of the Utilization Review and Evaluation Project, Yale University, New Haven, Conn.

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This work was supported by contract HSM-42-69-60 from the Health Services and Mental Health Administration and by Public Health Service grants MH-13738, MH-15650, and MH-17728 from the National Institute of Mental Health.

The authors wish to thank Alberto DiMascio, Ph.D., for his comments on this paper.

[1] This section has been abbreviated here; more detail is available from Ms. Weissman on request.

larger groups: 1) 150 acutely depressed women (the depressives) who had come for the treatment of depression but had not made a suicide attempt, and 2) 62 patients (the attempters) who came for treatment following a suicidal attempt.

The depressives (N = 150) were participants in a collaborative outpatient research study on the treatment of depression that was conducted in two facilities (Connecticut Mental Health Center and Boston State Hospital). On admission to the study, psychiatrists judged them at interview as having had an acute depressive episode of at least moderate severity, using a scale based on verbal report, behavior during the interview, and secondary symptoms of depression (10). The symptoms were of at least two weeks' duration and included as main features: depressed feelings, sadness, guilt, feelings of worthlessness, tendency to cry, weight loss, or sleep disturbance. Patients with such disorders as schizophrenia or addiction were excluded.

The suicide attempters (N = 62) were patients who had attempted suicide within the previous three days and who had come to the Yale-New Haven Hospital emergency room. A suicide attempt was defined as any intentionally self-inflicted injury (including by ingestion) unless strong evidence existed that there was not even a partial or ambiguous self-destructive intent. Lack of intent was not assumed simply on the basis of the patient's denial, absence of serious risk to life, or manipulative elements. Patients were identified as suicide attempters by the psychiatrist at the time of interview. A more detailed description of the suicide attempters and the characteristics of the attempts has been reported elsewhere (5).

Because the depressive group included only women aged 26–60, male suicide attempters and those younger than age 25 were excluded from the research sample. The remaining 29 suicide attempters were then matched with 29 depressives as to age, social class, race, and marital status. A table of random numbers was used to select matches when more than one possible match existed.

Assessments

Extensive sociodemographic, historical, and clinical information was gathered for the total sample. All raters received training in the use of the assessment instruments. Clinical depression and its symptoms were assessed by a psychiatrist at the initial interview, using the shortened form of the Clinical Interview for Depression, which is a modification of the Hamilton Rating Scale for Depression (11), and the Raskin Three-Area Scale for Depression (10). A research assistant who was not involved with the patients' treatment assessed hostility and related interpersonal functioning on two separate instruments: 1) the Social Adjustment Scale (SAS)—a modification of the Structured and Scaled Interview to Assess Maladjustment (SSIAM) (12), and 2) the Recent Life Events (RLE)—a modification of the Holmes and Rahe scale—which recorded interpersonal stress in the preceding six months (13). Administration, item content, reliability, and validity of the SAS and the RLE have been described elsewhere (13, 14).

TABLE 1

Demographic Characteristics of Suicide Attempters and Depressed Patients

Characteristic	Attempters (N=29)	Depressives (N=29)	Level of Significance
Age			n.s.
20–29	19	19	
30–39	5	5	
40–49	3	3	
50 and older	2	2	
Sex			n.s.
Male	0	0	
Female	29	29	
Social Class*			n.s.
1 and 2	1	3	
3	5	3	
4	12	12	
5	11	11	
Race			n.s.
Black	8	6	
White	21	23	
Religion			n.s.
Catholic	15	17	
Protestant	12	6	
Other	2	6	
Marital status			n.s.
Currently married	13	12	
Not currently married	16	17	

*Based on Hollingshead's Two-Factor Index of Social Position (15).

Data Analysis

Differences between the two matched groups of 29 suicide attempters and 29 depressives were examined. Means were examined for continuous variables, and cross tabulations were examined for categorical variables. T tests or chi-square analysis with Yates correction, where appropriate, were used to test whether the two groups came from the same population. Two-tailed tests were used and the .05 level of significance was accepted.

RESULTS

As shown in table 1, there were no significant differences between the depressives and the suicide attempters in sex, age, social class, race, or marital status. These findings were expected in that the two groups had been matched on these variables.

Even though the subjects were not matched a priori on clinical status, data analyses revealed no differences in degree of clinical depression. As shown in table 2, both groups were rated as moderately depressed on the two clinical evaluation ratings—the Clinical Interview for Depression (derived from the Hamilton Scale) and the Raskin Three-Area Scale for Depression.

Seventeen variables assessed family background and premorbid psychiatric and social history in both patient groups. Four of the variables significantly differentiated

TABLE 2
Degree of Clinical Depression in Depressives and Suicide Attempters

Means of Assessment	Range of Scores	Attempters (N=29)	Depressives (N=29)	Level of Significance
Clinical Interview for Depression	1–7	3.03 ± 1.08	3.07 ± 0.50	n.s.
Raskin Depression Scale	3–15	8.92 ± 3.26	8.97 ± 1.40	n.s.

the suicide attempters from the depressives. Compared with the depressives, the suicide attempters had made a greater number of previous suicide attempts, had a more frequent history of drug use and criminal convictions, and had a more impaired total work record (table 3). The history of drug use was of a minor degree in both groups since major drug abuse excluded depressives from the original study.

Premorbid history and family background, as recorded in the social history, were strikingly similar in both groups. About 40 percent of both groups had been permanently separated as children from their fathers, either by death or by desertion. Fifty percent had close family members who had received psychiatric treatment; about 25 percent had close family members who had been treated for a depressive illness.

Individual clinical symptoms were assessed during psychiatric interview, when a psychiatrist made ratings of 13 individual symptoms using the Clinical Interview for Depression. As described previously, both groups were moderately depressed. The individual assessments provided an opportunity to examine the characteristics of specific depressive symptoms rather than only the broader diagnostic categories (see table 3). Attempters, as compared with depressives, had exhibited significantly less depressed appearance, less pessimism and hopelessness, and less impairment in their work performance during the previous week. While the attempters tended to have a generally poor work record that did not change much in the week prior to the suicide attempts, the depressives, on the other hand, had a stable work history but had an acute change in their work performance in the week prior to coming for treatment.

Suicide attempters were significantly more overtly hostile and demanding during the interview. Evidence pointing to hostile interpersonal relations outside the clinical interview was obtained from nine assessments. The SAS included five assessments of interpersonal friction over the past two months, and RLE included four assessments of an increase in arguments over the past six months. Six of the nine assessments significantly differentiated suicide attempters from depressives. The suicide attempters had significantly more overt interpersonal friction and a significantly greater number of increased arguments both with family members (extended family, distant relatives, and spouse) and with friends and dates. These difficulties were reported as occurring during the past two months and as extending to the previous six months (table 3) and were consistent with observations of increased hostility during the interview.

DISCUSSION

Depression and hostility are widely regarded as important characteristics of persons who make suicide attempts. Attempts to investigate their respective roles in the genesis of suicidal behavior, however, have been hindered because these two factors are not only correlated to some extent with each other, but also with such other characteristics as age and sex.

In this study we were able to delineate the relative independence of hostility and depression in suicide attempters by controlling for the potentially confounding effects of age and sex. Moreover, both depressives and suicide attempters were found to be moderately depressed to the same degree. Hostility, which was overtly expressed in the clinical interview and in interpersonal relations, still emerged as an important characteristic of suicide attempters.

The suicide attempters' interpersonal difficulties were both recent and of longer term, extending to a number of relationships within and outside of the family. The suicide attempters appeared at psychiatric interview with less depressed appearance and pessimism but with considerable overt hostility, irritability, and complaining behavior. Other differences between depressives and suicide attempters were few but consistent. The suicide attempters were more likely to have a history of excessive drug use, legal difficulties, and an impaired long-term work record.

There are limitations to this study that should be noted: Information was collected from the patient and was not confirmed by the patient's significant others; raters were not blind to the subjects' conditions. However, the consistency of the findings and their similarity with those of other studies suggest that these findings have implications for theory and clinical practice.

The Scope of Hostility in the Lives of Suicide Attempters

Hostility can be simultaneously viewed as a personality characteristic and as a quality of interpersonal relations. From both viewpoints the suicide attempters have difficulties in the regulation and the expression of overtly hostile feelings.

These findings are identical to the recent report by Paykel and Dienelt (9), who followed 189 depressed patients for ten months after the index episode. Of the original cohort, 12 patients attempted and one patient committed suicide. These 13 patients were compared retrospectively with the 176 depressives who did not make an attempt. The attempters were found to have a history of excessive drug use, previous suicide attempts, and increased overt hostility that was present both at the initial interview and at follow-up. Moreover, an excess of overtly directed hostility in depressed patients, especially at the time of psychiatric interview, was an important in-

dication of future suicidal behavior. Findings of Paykel and Dienelt, as noted before, may have been confounded by the fact that the group of suicide attempters was significantly younger than the nonattempters, were exclusively white, and while including only one male attempter, was compared with a depressed group of which 24 percent were men. However, when these sociodemographic differences were controlled in the current study, the results were still similar.

Other empirical studies and clinical reports have also commented on the presence of hostility in suicide attempters. Birtchnell and Alarcon (16) compared 91 suicide attempters with depressed outpatients and found that the attempters were younger and equally depressed. The suicide attempt usually followed an acute conflict with another significant person with whom the attempter had an intensely hostile and ambivalent relationship. Philip (17) examined personality characteristics of suicide attempters, neurotics, and normals. While he found no unique suicidal personality, he described suicide attempters as being poorly integrated and as having considerably more generalized hostility and interpersonal frictions. Vinoda (18) also compared suicide attempters to other psychiatric patients and found that the attempters scored very high on general hostility. Maris (19) found an association between sexual deviancy, drug abuse, marital problems, and suicide attempts. He set forth an intriguing hypothesis regarding cause and effect which stated that sexual deviancy and drug abuse were ways of coping that, if stigmatized, led to suicide attempts.

Clinical reports have discussed ways of predicting to what degree depressed patients are at risk for suicide. Many clinicians have discussed the relationship between hostility and suicide attempts. Lesse (20) described an increase in rage, defiance, discontent, nagging, and complaining as being of prime predictive importance in impending suicide attempts. When these behaviors were observed in a depressed patient who was under stress, impulsive, and had shown antisocial activities, the potential for a suicide attempt was especially high. The eruption of rage in a depressed patient has been noted by others (21–23) to indicate potential risk. Rosenbaum and Richman (24) observed that suicide attempters generate considerable hostility among those around them. An overwhelming degree of anger was expressed by relatives toward the attempters as compared with the feelings of relatives of other groups of patients.

Psychodynamics of Hostility and Depression

These findings have implications for the continuing exploration of the psychodynamic relationships between hostility and depression. The classical view, derived from early formulations by Abraham (25) and by Freud (26), has emphasized the mechanism of "hostility turned against the self" in the psychogenesis of depression. Carried to its logical conclusion, this formulation does not afford depression an independent role either as an affective state or as a clinical syndrome. Recent ego-psychology formulations derived from Bibring's far-reaching theory have provided for the independence of depression as a primary affect and for the pathogenesis of clinical depression as separate from the vicissitudes of aggressive drive (27, 28). Empirical studies by a number of investigators have supported Bibring's view (29–31).

TABLE 3
Comparison of Depressed Patients and Suicide Attempters

Variables Characterizing Attempters Compared with Depressives	Level of Significance
Social History	
Previous suicide attempts	$p<.001$
Excessive drug use	$p<.05$
Criminal convictions	$p<.05$
Impaired total employment history	$p<.05$
Clinical Symptoms	
Less depressed mood	$p<.01$
Less pessimism and hopelessness	$p<.01$
Less impaired recent work and interests	$p<.01$
More hostility at interview	$p<.05$
Interpersonal Difficulties	
Family	
More friction with relatives	$p<.05$
Increased arguments in family	$p<.05$
Increased arguments with relatives	$p<.05$
Increased arguments with spouse	$p<.01$
Friends	
More friction with friends	$p<.05$
Increased arguments with dates	$p<.05$

The findings from this study provide further empirical support for Bibring's theory. Hostility and depression were independent. Even when the level of depression was equivalent, the suicidal attempter had a greater number of manifestations of hostility during the clinical interview and in interpersonal relations than the nonattempter. A complete test of the alternative psychodynamic hypothesis is not possible since the psychodynamic formulations involve unconscious as well as conscious hostility, and the current study employed research methods that assessed only manifest hostility. Nevertheless, the findings are most compatible with a theory that regards hostility and depression each as a primary affect, rather than with one that regards depression merely as the transformation of hostility via retroflexion onto the self.

Assessment of Hostility

The pattern of overt hostility observed in the suicide attempters at the time of interview may be particularly important. Previous research has noted a differential relationship between hostility and depression depending on the intimacy of the interpersonal relationship (32). Acutely depressed women, when compared with normals, expressed considerably more overt friction in most interpersonal relations; this friction was greater with close members of the nuclear family than with friends, neighbors, or distant relatives. At psychiatric interview, however, the depressed woman was not hostile but was cooperative, compliant, and docile. It was suspected that the discrepancy between the depressed woman's behavior at interview and at home accounted for discrepancies in the

literature about hostility in depressed patients.

In contrast, the suicide attempters were uncooperative, complaining, and hostile when interviewed. Overt hostility at interview is one of the more important distinguishing features of the attempters. Clinicians may feel that a depressed patient who becomes overtly hostile, especially to staff, is improving. Our results suggest a contrary interpretation. Angry, complaining, hostile behavior to strangers and to staff in a depressed patient may be indicative that he is at risk for suicide attempt.

Treatment and Prevention

The hostility in the suicide attempters may have distracted the clinician from noting that they were also moderately depressed, as depressed in fact as the patients who had already been found suitable for pharmacologic and psychotherapeutic treatment. Silver and associates (1) have noted a lack of controlled studies that measure the effect of antidepressant therapy on the wish to die and on subsequent completed suicide. The Boston-New Haven Collaborative Depression Project (33) found a marked drop in suicidal tendencies in depressed patients who were given antidepressants during the first four weeks of treatment. Most of the improvement occurred in the first week of treatment, and few suicide attempts occurred during further treatment. It is possible that successful treatment of the depression may have reduced the suicidal risk.

Given the amount of hostility displayed at interview, the suicide attempter is often unlikely to be diagnosed and treated as depressed, and even if he is diagnosed as depressed, he may be difficult to engage in treatment. Suicide attempters alienate staff, family, and friends. In treatment their hostile behavior may lead to early discharge or dropout. We found them to be an especially uncooperative group for follow-up studies. Although all but one patient in this study was referred for psychiatric treatment, 25 percent of the suicide attempters were not receiving psychiatric treatment one week after the suicidal episode, and by two weeks this figure had risen to 43 percent, indicating failure to become engaged in treatment. Attrition from an eight-month outpatient treatment program in the depressed sample was infrequent, occurring in less than 15 percent of the sample (33). The tendency of the suicide attempters to have a less overt depressed appearance can be misleading. Given their high potential for successful suicide and their tendency to underrepresent their depression and to alienate staff and family, maximum efforts to treat and follow the suicide attempters should be made.

CONCLUSIONS

The suicide attempter is usually depressed, hostile, and immersed in a network of interpersonal relations that are frustrating and maladaptive. Their personality resources seem to be inadequate to cope with the burden of both depressed and hostile feelings, and as their defenses fail, symptom formation spills over into acting out. The suicide attempt may thus be viewed as the result of a failure to achieve more mature forms of psychodynamic defense and as a form of acting out. The suicide attempt serves multiple functions, including as a means of communicating the attempter's despair and helplessness and, one hopes, mobilizing persons around the attempter, including mental health professionals, to come to his assistance.

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Hopelessness, Depression, and Attempted Suicide

BY KENNETH MINKOFF, M.D., ERIC BERGMAN, AARON T. BECK, M.D., AND ROY BECK

The authors have identified a component of the syndrome of depression—the cognitive element of negative expectations—as a stronger indicator of suicidal intent than depression itself. This not only suggests a solution to the puzzling question of why there is a relationship between depression and suicide, but also indicates that approaches specifically designated to alleviate hopelessness may be successful in preventing suicide.

THE QUESTION of what motivates an individual to attempt or to commit suicide has puzzled the lay public and professionals alike. Laymen are prone to state empathically that such an individual "was at the end of his rope," "could see no other way out"—was, in a word, hopeless.

On the basis of clinical observation of suicidal persons, several investigators have reached similar conclusions. Beck (1), in an intensive study of 50 depressed suicidal patients in psychotherapy, noted, "Suicidal preoccupations seemed . . . related to the patient's conceptualization of his situation as untenable or hopeless. . . . The suicidal patients generally stated that they regarded suicide as the only possible solution for their desperate or hopeless situations." These patients were later able to regard their hopelessness as cognitive distortions or as derived from erroneous or unrealistic premises. Farber (2) observed, "It is when the life outlook is of despairing hopelessness that suicide occurs." Similar observations have been made by Kobler and Stotland (3).

The paucity of systematic research to test and explore these clinical observations of the relationship between hopelessness and suicide is striking. One explanation is the entrenched belief of many clinical investigators that hopelessness is a diffuse feeling state and therefore too vague and unquantifiable to be systematically investigated. Stotland's review of the literature on hopelessness (4), arguing eloquently against this belief, proposed that hopelessness can be readily objectified by defining it as a system of cognitive schemas whose common denominator is negative expectations about the future. Thus, a pessimistic or hopeless individual expects or believes that nothing will turn out right for him, nothing he does will succeed, his important goals are unattainable, and his worst problems will never be solved. This definition of hopelessness (or pessimism) as a set of negative expectations about the future is used in this paper.

Another possible explanation for the sparse research on the relationship of hopelessness to suicide is that the main thrust of clinical research in this area has explored the link between depression and suicide. However, although the relationship of depression and depressive illness to attempted and completed suicide has been fairly well established by a variety of studies (5–10), there are few data to suggest the nature of this relationship. At least three possibilities should be considered. One possibility is that suicidal behaviors are an intrinsic part of depression, just as fever is an intrinsic part of pneumonia

Based on a paper read at a New Research session at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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This work was supported by Public Health Service grant MH-15989 from the National Institute of Mental Health.

TABLE 1
Demographic Characteristics of 68 Suicide Attempters

Category	White	Black	Puerto Rican
Male			
Under 35	14	11	1
Over 35	8	3	0
Female			
Under 35	11	15	1
Over 35	3	1	0

(although it is not always present). Another possibility is that the statistical association between depression and suicide is merely an artifact resulting from a joint attachment to a third variable, such as age, to which each is directly statistically related. Finally, there is the possibility that depression and suicide are related because each has an underlying *causal* factor in common.

Menninger (11), one of the major exponents of the third hypothesis, utilized Freud's classical theory of depression to argue that both depression and suicide were expressions of introverted unconscious hostility. This thesis has not been supported by experimental work (7). Newer theoretical constructs of depression by Beck (7, 12, 13), Bibring (14), Gaylin (15), and others have de-emphasized the role of retroflected rage and have focused on what Beck (7) has termed "the Cognitive Triad of Depression," i.e., "negative attitudes of the depressed individual toward himself, the outside world, and his future" (12). This triad is viewed as a key underlying the other phenomena of depression.

Several empirical studies support the statistical relationship between hopelessness and suicide. In a systematic investigation of suicide notes, Bjerg (16) reported that in 81 percent of the notes the writer regarded himself "as having a desire . . . which could not, cannot, or will not be fulfilled." Farnham-Diggory (17) reported that suicidal patients showed a significantly constricted subjective view of the future, compared with the nonsuicidal patients. Ganzler (18) compared six groups (ten men and ten women in each group) on various social and interpersonal perceptions: one group in life crisis who were suicidal; one group in life crisis who were not suicidal; one group of noncrisis, nonsuicidal psychiatric outpatients; and three groups of normal subjects. He found that, although all three psychiatric groups described their current life situations in negative terms, *only the suicidal group rated the future negatively*, in particular by anticipation (and fear) of social isolation in the future.

In a factor analysis of the Beck Depression Inventory (19), Pichot and Lempérière (20) isolated a factor with high loadings for only two items: hopelessness (.40) and suicide (.34). Cropley and Weckowicz (21) reported an identical factor with even higher loadings on hopelessness (.53) and suicidal wishes (.57). Beck's analysis of the intercorrelations of individual items on the Depression Inventory showed that suicidal wishes correlated more highly with hopelessness than with any other item (7).

In the present study, using quantitative measures of hopelessness, depression, and the seriousness of intent of a suicide attempt, we attempted to investigate the relationship of hopelessness and suicide by testing the following hypotheses:

1. A significant correlation exists between negative expectancies (hopelessness) and seriousness of intent of suicide attempters.
2. Seriousness of intent of suicidal attempts is more closely related to hopelessness than to the syndrome of depression in general.

METHOD

The sample consisted of 68 consecutive suicide attempters admitted to Philadelphia General Hospital over a period of six months. There were 37 men and 31 women (two of whom were pregnant); 36 were white, 30 were black, and two were of Puerto Rican descent. The range of ages was from 14 to 63, and the mean age was 29.4 years. The demographic characteristics of the sample are presented in table 1.

With regard to social variables in the sample, 38 were single, 19 separated, six divorced, one widowed, and only four married. There were 28 Catholics, 28 Protestants, six Jews, and six with no religious affiliation. The mean educational level was 10.47 years of schooling.

Each patient in the sample was assigned a psychiatric diagnosis in accordance with the *Diagnostic and Statistical Manual of Mental Disorders*, second edition (22). The diagnosis was related to the *acute* reason for the current admission and was based on a combination of evaluation by the house staff (for those patients admitted to psychiatric wards) and clinical evaluation by our research staff. The distribution of acute psychiatric diagnoses in the sample was as follows: 45 (66.2 percent) had a depressive disorder (neurotic or psychotic) and 23 (33.8 percent) were diagnosed as schizophrenic. Ten patients were admitted to medical wards and the remainder (88.5 percent) to the psychiatric inpatient service.

Forty-seven patients attempted suicide by ingestion of some dangerous substance; 44 of these (65 percent of the total) ingested coma-producing drugs. Nineteen (28 percent) had used cutting or piercing instruments and the rest had used a variety of methods including hanging, jumping, and drowning; six (nine percent) had used more than one method.

The decision to include a patient in the sample was based primarily on the determination that he actually was a suicide attempter, as opposed to a threatener or ideator, to a self-mutilator with no intention of killing himself, or to a patient who had accidentally inflicted self-injury or unintentionally taken an overdose of a drug. For this determination, we used the criteria of Silver and his co-workers (10): 1) a patient was included if he stated that he had deliberately harmed himself in order to terminate his life; 2) a patient was included regard-

less of how slight or how great his injury was; and 3) a patient was *not* included if he had threatened or considered suicide but stopped short of carrying it out (such as standing on a bridge but not jumping).

Each patient in the study was seen within 48 hours of admission to the hospital on two separate occasions by members of our research staff. In one interview, conducted by an experienced clinician, the patient was evaluated clinically and a comprehensive history, including the circumstances and state of mind at the time of the suicide attempt, was taken. In addition, data regarding medical, social, and family history were collected. The second interview, conducted by a psychological technician, elicited a large amount of detailed personal information from the patient, including in particular demographic data and patterns of alcohol and drug use. In this interview, the patient was given the Beck Depression Inventory (BDI) (7) and the Generalized Expectancies Scale (GES) (23).

The major findings of the present study are based on the results of the BDI, GES, and Suicidal Intent Scale for each patient. The BDI was used as a means of measuring the intensity of depression (irrespective of primary diagnosis); it includes cognitive, affective, motivational, and vegetative elements of depression. The possible range of scores is 0–63 (7). The GES consists of 20 statements about the future, which the patient marks as true or false. The score ranges from 0, representing no hopelessness, to 20, representing maximum hopelessness. There is considerable evidence of the concurrent and construct validity of this scale: it correlates well with other scales intended to measure future time perspective; the scores correlate well with clinical ratings of hopelessness; and the scores correlate with ratings of depression and reflect changes in depression (23).

The Suicidal Intent Scale, developed by our research unit (24), is a 15-item scale that evaluates the seriousness of the patient's psychological intent by assessing the circumstances surrounding the attempt and the patient's post-attempt description of his intentions and expectations during the attempt. The scale does not rely on the physical damage resulting from the attempt or on any demographic or historical data. The range of scores is from 0 to 30. The score on the Suicidal Intent Scale is determined by the clinical interviewer on the basis of data elicited in the interview. The first section of the scale (items 1–9), "Circumstances related to suicide attempt," deals with factual aspects of the attempt (e.g., timing, planning, suicide note). The informants are the patient and another reliable person. The second section (items 10–15), "Self-report," is used to record retrospectively the patient's thoughts and feelings at the time of the attempt.

Thirty-one of the patients in our sample were compared for interrater reliability on the Suicidal Intent Scale by two independent raters, and the correlation was found to be .95. The correlation between the "Circumstances" subscale (items 1–9) and the "Self-report" subscale (items 10–15) was .43 ($p < .01$) on a sample of 68 patients.

The construct validity of the scale is supported by the finding of Silver and his associates (10) of a significant positive correlation between depression and intent in 45 suicide attempters and by the finding of Beck and associates (24) that the mean intent score on the "Circumstances" subscale was significantly higher in a group of 31 successful attempters than in a group of 49 unsuccessful attempters.

It should be noted that the BDI and GES were administered and scored in a separate interview by an interviewer other than the clinician who conducted the clinical interview, completed the Suicidal Intent Scale, and made the diagnosis.

RESULTS

The mean score on the BDI for the full sample was 21.93, with a standard deviation of 13.2; the mean GES score was 7.87, with a standard deviation of 6.1; and the mean Suicidal Intent Scale score was 12.87, with a standard deviation of 6.2.

A correlation matrix was calculated using the following variables: age, Suicidal Intent Scale score (Intent), GES score, and BDI score. It was found that age showed no significant correlation with any of the other variables.

As expected, the BDI and GES scores showed a highly significant positive correlation ($r = .68$). The positive correlation of Intent and GES ($r = .47$) was significant at the .001 level, while the correlation of BDI and Intent ($r = .26$) was significant only at the .05 level. Using Hotelling's test of the difference between two dependent correlation coefficients, we found that the correlation between Intent and GES was significantly higher than that between Intent and BDI ($p < .001$). Further computations revealed that the partial correlation of Intent with GES (holding BDI constant) was .41 ($p < .001$), while the partial correlation of Intent with BDI (holding GES constant) was −.09 (nonsignificant).

Additional analyses were conducted in order to determine whether scores on the two subscales, "Circumstances" (items 1–9) and "Self-report" (items 10–15), were consistent with the findings of the whole Suicidal Intent Scale. This was particularly important since only the first subscale had been validated in comparisons with completed suicides (24). We found that the analyses of the subscales conformed to the findings reported above. The correlation of "Circumstances" with the BDI was $r = .13$ (nonsignificant) and with the GES was $r = .31$ ($p < .01$); the significance of difference between these was $p < .10$. The correlation of "Self-report" with the BDI was $r = .30$ ($p < .01$) and with the GES was $r = .64$ ($p < .001$); the difference between these was significant ($p < .001$).

The sample was divided into three groups of roughly equal size according to the BDI score, and a one-way analysis of the variance of the mean Intent scores for each group was performed. The analysis revealed a positive nonlinear variation of Intent with BDI, but this was not significant ($p < .10$). A similar analysis was per-

formed on the variance of Intent with GES. The analysis showed a positive linear variation that was statistically significant ($p < .01$).

The data were further analyzed by dividing the sample into two roughly equal groups according to both GES (0–7 and 8–20) and BDI (0–19 and 20–63) scores and then comparing the mean Intent scores in the four paired groups: low hopelessness-low depression (N = 26, mean Intent score = 10.27); low hopelessness-high depression (N = 9, mean score = 9.11); high hopelessness-low depression (N = 8, mean score = 16.38); and high hopelessness-high depression (N = 25, mean score = 15.80).

Whether the BDI (depression) scores were high or low, the groups with high GES (hopelessness) scores had the higher mean Intent scores. Using t tests of the differences between the mean Intent scores in the various groups, the following results were obtained: 1) between high GES-low BDI and low GES-high BDI, $t = 2.88$ ($p < .025$); 2) between high GES-low BDI and low GES-low BDI, $t = 1.93$ ($p < .10$); and 3) between high GES-high BDI and low GES-high BDI, $t = 3.24$ ($p < .005$). The results indicate that intent varies with hopelessness regardless of whether depression is high or low; however, when depression is high, the difference is very significant, but when depression is low the difference does not quite attain significance.

The data were then analyzed for each of the two diagnostic groups in the sample: schizophrenia (N = 23) and depressive disorder (N = 45). Though each patient fell into one of these groups of *acute* diagnosis, some patients also had additional chronic problems, such as alcoholism, drug abuse, or a character disorder. In the group of schizophrenics, mean Intent = 13.46, mean BDI = 24.17, and mean GES = 8.12. In the group of depressives, mean Intent = 12.55, mean BDI = 21.34, and mean GES = 7.66. The differences in means between the diagnostic groups and between each group and the total sample were not significant.

The difference between the two diagnostic groups was striking. In the depressive group, with schizophrenics eliminated, the correlation between BDI and Intent became highly significant ($r = .44$, $p < .005$). However, the correlation between GES and Intent was even more highly significant ($r = .64$. $p < .001$); using Hotelling's test, we found that the difference between the correlation coefficients for GES-Intent and BDI-Intent was as significant ($p < .001$) for depressives alone as it was for the whole sample.

In the schizophrenic group, the correlation of BDI and Intent ($r = -.07$) was negative and insignificant. The correlation of GES and Intent *was* positive ($r = .27$), but it was not significant, perhaps because of the small number. There was a difference between the correlation coefficients that was certainly suggestive of a trend, but this was not significant either.

DISCUSSION

The findings supported the hypotheses. We found a highly significant positive correlation between the level of hopelessness (as measured by the Generalized Expectancies Scale) and the seriousness of suicidal intent (as measured by the Suicidal Intent Scale) over the total sample. This significance was retained in the nonschizophrenic diagnostic group, but the correlation was positive though not significant in the schizophrenic diagnostic group. We also found a significant positive correlation between depression and intent in the total sample, especially in the depressed group. The latter result replicates the findings of Silver and his co-workers (10) in a similar study; 90 percent of their sample consisted of depressed patients and they also found a significant positive correlation between depression and intent.

Further, hopelessness showed a closer relationship to intent than did depression. In the total sample, this was indicated by the significantly higher value for GES versus Intent ($r = .47$) than for BDI versus Intent ($r = .26$), by the significant partial correlation of Intent with GES, by the highly significant positive variance of Intent with GES, and by the significantly higher mean Intent scores in the groups with high hopelessness scores than in those with low hopelessness scores, whatever the level of depression.

It is interesting to note that schizophrenics, despite their small number, showed a positive (though nonsignificant) correlation between intent and hopelessness and a noticeably (though not significantly) closer relationship of hopelessness to intent than of depression to intent. This indicates that, although the research is oriented more toward nonschizophrenics, the hypotheses have been supported to some extent regardless of diagnostic group.

We have thus identified one factor in the syndrome of depression—the cognitive factor of negative evaluation of the future (pessimism or hopelessness)—as apparently being more closely related to the seriousness of intent than to depression itself. In examining this finding, we must consider whether the data might be biased by the fact that the sample consisted only of suicide attempters admitted to the hospital. We must also question whether there might be a bias due to the fact that Philadelphia General Hospital tends to serve a population of lower socioeconomic background. There is no a priori reason to assume that, even if such biases do exist, they exert a significant influence on the results. However, at present, the generalizability of the findings is limited to suicide attempters of low socioeconomic status who are admitted to a general hospital.

It is also important to observe that, although we have suggested a relationship between hopelessness and suicidal intent, this does not prove that hopelessness *causes* suicidal behavior. In fact, the correlation between the measures of hopelessness and intent accounts for only 22 percent of the variance. Thus, although the results support the clinical and theoretical hypothesis that hopelessness is the common causal factor linking depression and suicide, further work is necessary to show how hopelessness leads to suicidal behavior.

CONCLUSIONS

Studies by other workers have already identified depression as a danger sign of possible suicide and have indicated that the danger increases as the degree of depression increases. The present study suggests that hopelessness is another danger sign, perhaps more sensitive than depression, of the seriousness of suicidal intent. This finding suggests that, if we focus on reducing a patient's hopelessness, we may be able to alleviate suicidal crises more effectively than in the past. This might, for example, be accomplished by a psychotherapeutic approach in which negatively distorted expectations for the future are corrected. On the other hand, if the patient's hopelessness is based on objective factors, appropriate social intervention may provide the necessary environmental changes to alleviate the reality situation.

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Videotape Confrontation After Attempted Suicide

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The authors report a new treatment approach for suicide attempters in which the patient's condition, the measures taken to save his life, and the reactions of his family are recorded on videotape when the patient is brought to the emergency room. After psychotherapy has begun, the patient views the videotape. This method challenges the patient's denial of despair and suicidal intent by confronting him with the consequences of his suicidal behavior. The authors point out the potential usefulness of videotape confrontation for a broad spectrum of self-destructive patients.

> Oh wad some power the giftie gie us to see oursels as others see us.
>
> —ROBERT BURNS, *To a Louse* (1786)

SUICIDE RESEARCH has shed increasing light on the prediction, identification, and assessment of the suicidal patient. There has been less achieved, however, in the area of treatment. Suicide ranks as the 11th leading cause of death in the United States. It can be estimated that 25,000 people will die a self-inflicted death and that 250,000 others will make a suicide attempt this year (1, 2). Unfortunately, they will be treated with a variety of rather conventional psychotherapeutic approaches, none of which has been adapted specifically for the suicidal person.

Treating the seriously suicidal patient poses significant problems for the clinician. Nowhere else in his practice is the psychiatrist faced with a "life-or-death" situation; the suicidal crisis is the most frequent psychiatric emergency physicians are called upon to treat. A sense of urgency is present that may influence the choice of a therapeutic approach. The clinician is often confronted with his own feelings about death and self-destruction when treating a suicidal patient. The explicit need to involve the spouse (3), the immediate family (4) or members of the extended family (5), and significant others may be contrary to his usual therapeutic stance. Nevertheless, we believe that many serious suicide attempts occur in sociopsychologic contexts that require active and precise information.

Once committed to the treatment of a suicidal patient, further problems may arise for the therapist. Suicidal ideas may be fleeting. Especially during the period after an attempt, motivation for self-exploration may be lacking. Suicidal intent, or indeed the suicidal behavior itself, may be denied, distorted, minimized, or rationalized. Rapid discharge from a hospital emergency room (frequently to the very circumstances that precipitated the behavior) with subsequent discontinuation of therapeutic contact is not unusual (6). Resistance or denial by the family as well as by the patient may frustrate attempts to encourage meaningful therapeutic involvement (6, 7). Finally, the nature of the attempt as an appeal may often be answered, albeit in a temporizing way. Thus the new equilibrium that is achieved rejects clinical intervention that might examine and disturb its tenuous nature.

When the clinician does have a motivated patient, other problems still remain. How can he approach the suicidal patient in a way that will maximize the chance for a positive outcome? Psychodynamic individual psychotherapy requires time, intellect, a philosophical commitment, and an evolving relationship for success. However, denial or distortion of the suicidal behavior may be an impediment to treatment. Group therapy does afford the opportunity for early and multiple confrontations of the patient with the direct consequences of his suicidal ideas or behavior, but this technique is limited since frequently neither the attempter, the other patients, nor the therapist knows anything specific about the suicide attempt—and all tend to minimize it and pass it by. Furthermore, Frederick and Farberow (8) have noted that group therapy with suicidal patients can impose a great emotional drain on the therapist, with a limited return for the patient.

The value of group therapy may be in maintaining large numbers of chronically suicidal patients in a peer-supported context. Group therapy is a technique therapists can use to motivate denying patients immediately after an attempt. Goldberg and Mudd (3) have explored marriage counseling and note that the patient's frequent suicidal communications to the spouse may militate against involving the spouse in therapy. "Relearning" approaches have been suggested by Frederick and Res-

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The authors wish to thank LCDR George F. Kolodner, MC, USNR, and LCDR Lawrence Y. Kline, MC, USNR, Staff Psychiatrists at the Naval Hospital, for their participation in the treatment of the cases presented, and Capt. Thomas H. Lewis, MC, USN, Chief of Psychiatry at the Naval Hospital, whose helpful support made this collaborative effort possible.

The opinions expressed herein are those of the authors and do not necessarily reflect the views of the Department of the Navy or of the National Institute of Mental Health.

nik (9), but such a technique requires cooperation from the patient and his family; moreover, punishing, extinguishing, or learning to avoid such a response as suicidal behavior does not always decrease or remove the stimulus.

Resnik and others, in a number of papers (9, 10) and editorials (11, 12), have pointed out the need for new and innovative treatment techniques to overcome the clinical problems outlined above, as well as the greater use of those which do exist. This paper will describe the adaptation of videotape confrontation for use with patients who have made a suicide attempt and who are exposed to emergency medical care and its sequelae. We believe the procedure offers a potentially fruitful approach to the suicidal patient and his family. We call the technique the Self-Exposure Experience (SEE).

Recently, Berger brought together in one volume (7) the multiplicity of techniques and clinical indications for the use of videotape, but its use with suicide attempts was not included. Cornelison and Tausig (13) have employed a videotape taken at the time of psychiatric illness as a means of enhancing self-understanding in psychotherapy. Moore and associates (14) showed that initial psychiatric interviews recorded on videotape and replayed for the patient enhance therapeutic progress. Danet (15) has demonstrated that seeing oneself on videotape may challenge the defense of denial. He has stated that for some patients a visual image carries more weight than "innumerable verbal confrontations." Berger has carried the concept further. His recently reported split-image technique (16) appears to be a modified Rorschach, utilizing the patient's associations to his own highly personalized perceptions of the images. Alger and Hogan (17) have integrated the use of videotape into their practice of conjoint marital therapy.

All of this might be paraphrased as follows: A picture of the treatment of a suicide attempt may be worth a thousand words in therapy afterward.

METHOD

Each patient brought to the emergency room of the Naval Hospital (located at the National Naval Medical Center, Bethesda, Md.) following a suicide attempt is evaluated by a psychiatrist after the appropriate emergency medical treatment has been provided. When the patient first arrives, our on-call videotape team is alerted; they obtain consent for taping from the patient (if he is capable) or a relative. The patient's condition, the life-saving measures taken, and his interaction with hospital personnel are recorded. Special efforts are made to videotape the reaction of the family if they are present. Closeups are employed to capture the patient's facial expression (confusion, disorientation, agitation, or lethargy) as well as those of his family (concern or indifference).

After emergency care is rendered, the patient is admitted to the hospital service dictated by his physical condition. If he has gone to intensive care or general surgery, he is transferred to the psychiatric service when he is ambulatory and alert to his surroundings. Often, almost a week may have elapsed between the emergency room treatment and the transfer. The patient's memory of the event may be understandably impaired. Once admitted to psychiatry, the patient attends sessions in individual and group psychotherapy and participates in the milieu program with other (nonsuicidal) patients. After two individual therapy sessions, which allow him an opportunity to discuss his situation, he is brought to a SEE videotape session, in which his emergency room behavior is viewed.

In the SEE session, the patient sits in an upholstered chair in a quiet viewing room with subdued lighting. His anxiety level is measured by administering the State-Trait Anxiety Inventory (STAI) (18). Electrodes are applied to permit continuous measurement of his galvanic skin response (GSR) (19). The baseline response is monitored for two minutes, using a neutral stimulus (a picture of an armchair on the videotape monitor), and the patient is then shown a ten-minute segment of the emergency room videotape. The "State" scale of the STAI is readministered as a measure of anxiety after the patient has seen the tape.

SEE sessions follow each two individual therapy hours until there is a decrease in the amplitude and frequency of GSR responses and in the STAI score and the treatment team feels that the videotape sessions have "served their purpose." The goal is to actively engage the patient in psychotherapy by the time the SEE is discontinued.

CASE REPORTS

The following case reports illustrate the courses of two patients treated in this program.

Case 1. A 21-year-old married secretary walked into the emergency room and announced that she had ingested the contents of a bottle of 100 aspirin tablets. Her speech was slurred and her eyes were swollen. Intravenous puncture, gastric lavage, and the psychiatric interview were videotaped. She revealed that she had dropped out of college the year before to share the burden of financial support with her husband. She wept as she described how she had disappointed her father. Her mother had made many suicidal gestures when the patient was younger. Earlier on the day of admission, the patient had been arrested for shoplifting, only one week after her husband had left her.

The patient was admitted to the medical service for 24 hours and then was transferred to psychiatry. On the psychiatric service she said that she felt fine and wished to leave the hospital. When she persisted in her desire to leave against medical advice, she was shown her videotape. Obviously shaken by the SEE, she stalked out of the viewing room into her doctor's office. With anger, she accused him of sadistically exposing her to the pain of seeing her videotape. She was able to trace her fury to an early memory of her mother: "That's just the way my mother looked after she attempted suicide." She remembered the anger, frustration, and despair that she had experienced as a child after her mother's frequent suicide attempts. She recognized that she was copying the behavior of a woman whose selfishness and heartlessness had angered her.

Although she initially denied suicidal intention, she sub-

sequently became aware of her ambivalence over living with her present marital discord. She gradually accepted responsibility for her own self-injurious behavior and willingly remained in the hospital to work out a less destructive way of dealing with her conflict. After four weeks of psychotherapy and four SEE sessions, the treatment progressed from the immediate precipitating situations to other issues. The number of GSR arousal patterns had decreased from 11 in the first session to one in the fourth session. The physiological indicator of a decrease in anxiety was consonant with a clinical decrease in denial of her suicidal intent and its prodromata. (This patient was not evaluated on the STAI scales since the schedules had not been received.)

The SEE seemed to confront this patient with the fact that she was emulating her mother, something she could not bring herself to accept. She might well have come to that conclusion in a more conventional therapy regimen, but certainly not as vividly and not as soon. The unconscious resistance that was inhibiting her accessibility for treatment was clearly and incisively uncovered so that the patient could work with it immediately.

Case 2. A 22-year-old male dental technician who had been in psychotherapy for two years had ingested ten secobarbital capsules and slashed both wrists one week after his psychiatrist left for vacation. He was brought to the emergency room by his roommate. The painful cleansing of his wounds and a short interview were recorded on videotape. The patient revealed that he wanted to die because he felt that no one cared for him. His mother and father were divorced and emotionally distant. He had lived with his father since the age of 12. He felt that his friends were using him.

He was admitted to the psychiatric service and viewed the SEE as described in our protocol. Before viewing the videotape, he was quite verbal in psychotherapy sessions, but quite intellectual about his difficulties in sustaining a meaningful human relationship and his despair at "being abandoned" during his psychiatrist's vacation. After the first viewing session, he was silent in treatment for the first time. Then he said, "I can't deny it, there I was. I really tried to kill myself." He poured out feelings of despair and related dreams of his fears and wishes for death. After the second SEE he angrily accused his therapist of conducting an investigation of him. "You know a lot more about me than you are telling. You're just waiting for me to say that I've had trouble with women so that you can say you knew it." The patient related his difficulty in dealing with women to the mistrust he had for his mother, who had abandoned him at age 12. After the third SEE he said, "First I blamed the staff and the doctors for what I felt but it's not you, it's me."

In the last SEE session, the decrease in the STAI score and concurrent decrease in GSR complexes were consonant with the decrease in the patient's denial and projection. He had established a firm working relationship with his therapist and had ventilated his anger clearly; the SEE was discontinued. For this patient, the videotape confrontation seemed to cut through the defense of intellectualization and to allow him to feel his desperation and the deep feelings of abandonment that preceded his self-destructive behavior.

DISCUSSION

In the two cases presented, denial of despair and suicidal intent were challenged by visually confronting the patient with the consequences of his suicidal behavior. This encouraged the patient to express feelings related to the suicidal act. In each case, relevant material was stimulated that helped to engage the patient in the therapeutic alliance.

It is of interest that, following videotaped confrontations, both patients vented hostility upon the therapist as their predominant initial defensive posture. This situation was manageable in therapy and could be interpreted as stimulating further interaction on the feeling level. In time, both patients were able to assume responsibility for their suicidal behavior and begin to understand some of its antecedents. In ensuing sessions, they could relate their self-destructive impulses to significant experiences both present and past. Issues related to the suicidal act remained prominent in therapy for four to six weeks in both cases. We feel that this is much longer than in the usual (non-SEE) treatment for suicide attempts. One of our hypotheses is that recidivism is correlated with the paucity of time spent in therapy considering the real events surrounding the actual suicide attempt, with a detailed medical evaluation of the risk to life. The shorter the time this is considered and the sooner the search for psychodynamic variables begins, the more likely another attempt will occur. The more the medical discussion is continued, detailed, and reported, the less likely there will be a repeat attempt. Repeatedly viewing the medical consequences prior to regular office visits, as in SEE sessions, may serve as a negative reinforcer of the suicidal behavior (10).

Serber (20) has reported a behavioral technique called "shame aversion therapy," in which social confrontation of the performance of a deviant act by the use of film or videotape frequently produces aversion to the deviant act (in this case, exhibitionism).

In seeking to understand these outcomes, there are additional factors inherent in the treatment of the patients that merit consideration. Perhaps both patients evidenced only token denial, which might have succumbed to verbal confrontation alone. The attention associated with a unique treatment modality may have an important effect on the patient's self-esteem. The therapist, too, may have put out a special effort with these patients because of the intellectual stimulation of a new technique. A follow-up study with appropriate control groups is currently planned to assess the impact of videotape confrontation and alternative factors in the short-term treatment of the suicide attempter. The technique also holds promise for those families who reinforce the patient's denial, who refuse to become involved, and who insist on the accidental nature of the attempt (21, 22). We are currently evaluating the use of SEE sessions with such families.

Recently, we presented videotapes of two adolescents (12) who rationalized and denied their behavior until they saw the tapes of their parents nakedly distraught. The youngsters could not maintain their feelings that they were unloved, feelings that had led to their suicide attempts.

The potential usefulness of videotape confrontations is limited only by the accessibility of equipment (which is becoming increasingly available) and the clinician's will-

ingness to make himself available when the emergency medical care is being given. One can foresee, for example, utilizing this technique with a variety of patients engaged in self-destructive acts. The juvenile diabetic or the difficult-to-manage epileptic who is recurrently brought to the emergency room in coma can later be confronted with the results of his neglecting to take his medications. Applications have been designed for the alcoholic, but the use of tapes with the drug addict is yet to be reported. The consequences of discontinuing any life-preserving medication could be forcefully illustrated to the patient. The clinical indications of SEE sessions are relevant to a broad spectrum of self-destructive patients who have traditionally been viewed as problems in medical and psychiatric management.

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Suicide and Psychiatric Education

BY WILLIAM A. KELLY, JR., S.T.M.

The author's literature survey suggests that the incidence of suicide among psychiatric residents is probably similar to that among residents in other specialties and may not be very different from that of other males in the same age group. However, the problem merits attention not only because lives are being wasted, but because psychiatrists and other physicians are in short supply and their importance to the community is considerable. The author believes that efforts to prevent physician suicide should begin in medical school, where the students should explore their inner conflicts and unsatisfying social interactions. During their residencies psychiatrists should be helped to prepare themselves to endure the irrationalities of their patients and the burden of isolation in their professional practice.

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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This research was made possible by a grant from the A.E. Bennett Neuropsychiatric Foundation.

IN THE FALL OF 1970, at the hospital where I was then engaged in chaplaincy training, a first-year resident committed suicide by taking an overdose of drugs. His death followed by less than two weeks the suicide death of a discharged woman patient for whose care he had been responsible. A month later, in apparently quite independent circumstances, a psychiatrist associated with the staff of the same hospital killed himself. The dismay, frustration, dejection, and anger among those directly acquainted with these persons and events lasted for many months.

Not unexpectedly the questions were asked, especially with reference to the two physicians' suicides, "Why did they do it? What might we have done to prevent their deaths? What should we be doing to help other troubled colleagues?" Because another resident had committed suicide two years earlier, the additional question was asked, "Is our experience here unique, or is there a generally high incidence of suicidal behavior or emotional disorder among psychiatry residents?"

In the medical literature considerable attention has recently been given to suicide by physicians (1–4). The suicide rate for psychiatrists has been suggested to be the highest of that for all medical specialties (1, 5). While investigation and thought have been given to the emotional problems and personality changes of psychiatry residents (6, 7), mining of the literature has turned up little statistical information about the actual frequency of suicide and mental illness among these residents. In order to determine whether this was a subject meriting intensive, in-depth research, it was decided to take the first step of discovering the extent of the problem. Dr. A.E. Bennett of Berkeley, Calif., who for many years has shown an active interest in quality psychiatric care and suicide prevention (8), gave immediate encouragement and counsel to a proposal for a research project and arranged for a grant of funds.

METHOD

Our aim has been to delineate the nature and extent of the problem of suicide and psychiatric disability among residents in psychiatry. By means of a questionnaire, we sought to obtain information for the ten-year period July 1960 to June 1970. The questions covered the incidence of suicidal behavior and other acute emotional disturbance among residents in psychiatry and also inquired about how those responsible for psychiatric training programs identify, respond to, and arrange treatment for disturbed residents. Space was given for the respondents' opinions about suicide prevention and mental health care for residents.

The questionnaire was mailed to 249 psychiatric residency program directors throughout the United States, covering the one-, two-, and three-year residencies listed in the *Directory of Approved Internships and Residencies* of the American Medical Association. Since the replies represented a self-selected sample, we chose a random sample of 28 of the 249 programs to provide a check on questionnaire results. We asked members of the random sample if during the period under study any psychiatric residents had committed suicide while in training; if the answer was "yes," we asked how many.

There were 88 questionnaire replies (about 35 percent of the training programs addressed) that furnished usable figures on suicide and disability among residents. Analyzing this sample for distribution by geographical region and by size rank in 1970–1971, we concluded that we had information from a representative cross section of all residency programs in the United States. Ten of the 88, or 11.4 percent, reported resident suicides during the ten-year period.

We had only 26 replies to the letter sent to 28 programs in the random sample. Of these, 25 answered "no" to the question about suicide by a resident during the ten years. Unable to extract replies from two members of the sample, we presumed "yes" answers for them, to raise the possible suicide incidence rate. These three "yes" answers gave a ten-year rate of 10.7 percent of training programs that presumably experienced resident suicides; this was not very different from the rate of the 88-member sample. Recognizing that these figures do not meet strict standards for purposes of parametric statistical analysis, we nevertheless believe that they are sufficiently good indicators for reporting and discussion.

Tables 1 and 2 summarize the information derived from the 88 questionnaire replies. No significant differences were found among programs when they were grouped according to size or geographical location.

RESULTS

Suicide Among Physicians

Such data as the literature furnishes on suicide by psychiatrists and psychiatry residents have been reported in discussions of suicide by all physicians. In 1971 Ross (4) presented a comprehensive survey of the international literature of the past 75 years on this subject. Discussing the incidence of doctors' deaths by suicide, he stated, "While ... rates vary from country to country, everywhere suicide appears to be an extraordinarily high risk for the doctor" This view seems to prevail fairly widely in the profession. To what extent is it valid?

In May 1965, the *Journal of the American Medical Association* began to report suicides among the causes of death of physicians. Late in 1968 two groups of investigators, who had worked independently, published their analyses of the *JAMA* information on physician death by suicide. Blachly, Disher, and Roduner (1) calculated that 2.66 percent of physicians' deaths during the 110-week period of their study were by suicide. They gave a suicide rate for all physicians of 36 per 100,000 per year, ranging from a low of ten per 100,000 for pediatricians to 61 per 100,000 for psychiatrists. Blachly and associates did *not* state that the overall physician suicide rate was unusually high. Rather, they said, "It appears that although the risk of suicide is very high among some doctors, it is negligible among others.... Specialty

seems to be a highly significant variable.... The large number who commit suicide in their early twenties and thirties is impressive" (1).

Craig and Pitts (2), covering physician suicide data for the 104-week period following mid-May 1965, not only counted physician suicide deaths reported by *JAMA* but also reviewed death notices received too late for *JAMA* publication and a number of ambiguously reported deaths. Their suicide count was somewhat higher than that of Blachly and his co-workers. Craig and Pitts gave a suicide death percentage figure of 2.72 percent, with an overall crude annual suicide rate of 38.4 per 100,000. Allowing for underreporting, they estimated that "the true suicidal rate in male physicians is probably at least 2.97 percent of deaths and 42 per 100,000 per annum" (2). They adopted the important assumption that the age distribution of the U.S. physician population corresponds to that of the overall U.S. white male population over age 24, and compared their findings with those published by Dublin and Spiegelman in 1947 (9).

After statistical analysis of their data, Craig and Pitts concluded:

> The rates calculated for male physicians are not different from those of 25–30 years ago, nor do they differ from those calculated for an appropriate segment of the general population of the United States. These results stand in marked contrast to conclusions drawn by others from their assessments of suicide by U.S. physicians.... Our assumption is that this is because previous studies have not been systematic nor have all the available records been examined (2, p.767).

Their rates for the various medical specialties ranged from 7.5 per 100,000 for radiologists and 15 for pediatricians to 65 for psychiatrists and 100 for otolaryngologists. Except for the high rate for otolaryngologists (a generally older group of practitioners), Craig and Pitts were of the view that the variations by specialty "have no statistical significance and therefore probably no other meaning, unless it can be shown that the differing rates among the various specialties occur regularly until larger numbers accumulate with the same sub-group suicide rates" (2).

At this juncture, then, it cannot be said with any degree of confidence that physicians in general, and psychiatrists in particular, do in fact kill themselves more frequently than other white males in the same age range in the general population.

Craig and Pitts (2) did find a significantly high rate of suicide in female physicians; with Freeman (5) and Blachly and colleagues (1), they underscored the point that most physician suicides seem to occur at ages when there is the possibility of many remaining years of professional service (2).

Suicide by Psychiatric Residents

Craig and Pitts (2) also presented statistics for deaths by residents, grouped according to specialty. They reported 13 resident suicides out of a total population of 31,687 residents in the U.S. during the two-year period of their investigation. Four of the 13, or 31 percent of all resident suicide deaths, were of psychiatry residents, the largest percentage among the specialties. This number of cases was too small to attain statistical importance. Their conclusion was: " None of the suicided resident specialty groupings differed from the distribution of residents by specialty in the U.S." (2). For the resident population as a whole, Blachly and associates (1) calculated a suicide death rate of 15 per 100,000 per year, while Craig and Pitts give the rate as 21. The discrepancy is not significant. Blachly noted that "the rate for residents was only one-half that for interns" (1).

TABLE 1

Programs Responding to Questionnaire on Suicidal Behavior or Psychiatric Disability Among Residents: 1960–1970 (N = 249)

Item	Number of Programs	
Programs reporting suicides, suicide attempts, or other psychiatric disabilities		54
Suicides*	10	
Suicide attempts	21	
Other psychiatric disabilities	45	
Programs reporting no suicides, suicide attempts, or other psychiatric disabilities		34
Programs replying to questionnaire		88

*One program reported two suicides; nine programs reported one suicide.

Turning to our own study (summarized in table 2) from a sample of 6,285 psychiatric residents, we report 11 suicide deaths. This is a rate of about 18 per 100,000 per year, which is not statistically different from those given in the two studies mentioned earlier. What those investigators discerned for a two-year period appears to hold true also for the ten-year period considered by our study. What statisticians sometimes call the "null hypothesis"—namely, that the suicide rate for psychiatric residents is the same as for all resident physicians—has not been disproved.

The Emotional Health of the Psychiatric Resident

Ten years ago Halleck and Woods (6) described some of the emotional problems of psychiatric residents. They noted then that statistics were not available as to the number of severe psychiatric decompensations occurring in residents, but "it would be over-optimistic to assume that they did not occur"; they appealed for frank recognition, open discussion, and careful study of the resident's emotional difficulties. Quite recently Pasnau and Bayley (7) published a useful summary of the literature pertaining to the difficulties experienced by psychiatry residents and then went on to discuss personality changes taking place in the first year of training. They observed a significant increase in the level of depression during the first year's training experience of residents they studied.

In our questionnaire study, we asked psychiatric train-

TABLE 2
Residents in Psychiatry Reported To Have Shown Suicidal Behavior or Experienced Psychiatric Disability During Training, 1960–1970

Item	Number of Residents	
Total number of residents trained by 88 programs replying to questionnaire		6,285*
Suicides	11	
Suicide attempts	31	
Other psychiatric disabilities	225*	
Total suicides, suicide attempts, other disabilities		267

*Figures are estimates, as some replies were approximate answers to questions on these points.

ing directors: "For the period under study, how many trainees other than those who have shown overt suicidal behavior have experienced a mental disturbance of sufficient intensity to require special therapy or hospitalization?"

The answers provided a total of about 225 residents. The respondents usually made it clear that their replies did not cover residents who were in therapy primarily for training purposes. The figure does not include those who might have been ill and have undergone treatment without the knowledge of their training directors, or those who were disturbed but carried on their work unnoticed. The number of suicides—11—plus 31 suicide attempts and 225 other psychiatric disabilities comes to 267, which gives a psychiatric resident casualty rate of something over four percent. While this cannot be offered as a "hard" statistic, it points to the inference drawn by Holt and Luborsky (10) over a dozen years ago from their study of psychiatric resident personality patterns and selection procedures:

> Some may get the impression that psychiatric residents are a remarkably immature or neurosis-prone lot. There is every reason to believe, however, that in these respects they do not differ much from young physicians learning other specialties. . . . Our findings support the conclusion that the great bulk of competent residents (and probably of good practitioners generally) are healthy, conventionally adjusted people (10, pp. 69, 281).

Stress Factors in Residency Training

Among the factors that have been identified as contributing to the stressfulness of the psychiatric residency years are: the resident's efforts to achieve identity and competence in his specialty; a heightened awareness of his own intrapsychic conflicts; the responsibility, often assigned in the first year, for the care of seriously disturbed inpatients; discouragement at the results of outpatient psychotherapy over a limited period with an unrepresentative group of patients; and conflicting advice from supervisors or teachers (6).

Institutional patterns and events may put additional strain on the resident's inner resources. Stanton and Schwartz (11), in their study of a mental hospital, noted that conflict and low morale among staff members led to an increase in pathological excitement among patients and a widespread intramural "collective disturbance." Their dictum, "The environment may cause a symptom," merits wider acknowledgment than it has probably received. When there is organizational change, group conflict, and staff disagreement within a training program, one may expect an increase in uncertainty, anxiety, and depression among staff members, including residents. Stanton and Schwartz suggested that organizational difficulties and staff disaffection be dealt with directly, openly, and specifically.

The care of suicidal patients is itself a risk element. In a study of the impact of the suicide of hospitalized patients on their psychotherapists, Kahne (12) found that in a certain hospital:

> Among 22 resident psychiatrists having from one to four years training, 14 percent had already had a patient commit suicide. . . . [It may be that] residents are being asked to assume responsibilities that they may not yet be equipped to handle (12, p. 36).

The 88 answers to our questionnaire survey indicated that over a ten-year period, 54 training programs (more than 60 percent of the sample) had the experience of one or more residents going through a serious emotional crisis during his training years (see table 1). Ten programs reported resident suicide deaths; 21 acknowledged suicide attempts by residents. In nine programs one resident had committed suicide, while in one program, two were reported to have killed themselves.

The survey answers showed a wide variety of attitudes and arrangements among the training programs with regard to the emotional needs of residents. One training director wrote: "There is a primary focus on the emotional stability of the resident as a key factor in his effectiveness as a therapist." In contrast, another director said: "Mental health care for psychiatrists and psychiatric trainees is not a function of the training program. . . . If one has to study the trainee population and seek out those who are unstable and then push them into therapy, they should not be in the profession." It is our subjective impression that half of the respondents showed a positive interest in assisting residents in personal growth and emotional maturation as part of their professional training.

Fifty-four training directors emphasized the importance of careful selection procedures in identifying latent pathology in applicants for residency positions. Only two of these mentioned any reliance upon psychological testing, although tests are now available, especially the Minnesota Multiphasic Personality Inventory, which can measure personality characteristics associated with suicide potential (13). The personal interview is the screening device most often relied upon.

For many years some programs have required residents to undergo personal analysis or psychotherapy. One respondent described the practice of giving each first-year resident 36 hours of "personality assessment" with an analyst; another offered 50 hours of voluntary individual therapy without cost to the resident (14). Thir-

teen respondents referred to their use of group dynamics and sensitivity training with uniformly positive evaluation. Four others described voluntary group therapy arrangements, with a large majority of residents electing to take part. Sadock and Kaplan (15) described in detail one such program at the Metropolitan Hospital Center in New York City. Sherman and Hildreth (16) reported on a group process seminar that increased the residents' awareness of and effectiveness in dealing with some of their own destructive ways of participating in groups. In one large residency program, new residents are regularly advised that suicidal thoughts may occur to them and require treatment but that this would not entail their expulsion from the program.

CONCLUSIONS

The findings of our study indicate that the incidence of suicidal behavior among psychiatry residents in the United States is probably not different from that of other residents. Possibly it is not different from that of males in the same age range in the general population. Psychiatric resident suicide and behavioral disorder is part of the larger problem of emotional or mental illness or suicide by physicians in general. The problem merits attention not so much because physicians are clearly in an inordinately high-risk profession but because, as Craig and Pitts have put it, "physicians are in short supply, their importance to their communities is considerable, and the loss of even one physician by suicide in mid-career is an event which should be prevented" (2). Neither physicians nor residents in emotional crisis are likely to reach out to, or be reached by, the suicide prevention and crisis intervention services that have been developed in many communities across the country.

Knowledge is available to those in psychiatric education regarding how to recognize psychological difficulties in applicants and in residents and regarding how to deal promptly and constructively with symptoms of disturbance (17–19) so that the chances of premature disablement or suicide by a resident are lessened and he can be assisted toward greater effectiveness as a person and as a practitioner. Putting it more bluntly, we know how to reduce the number of breakdowns and suicides by residents below the present level if we wish to do so. Measures toward this end that commend themselves include: 1) psychological testing and psychiatric interviewing at the time of selection; 2) sensitive individual supervision; 3) early, explicit discussion of suicidal thoughts and other stress reactions that the resident may be expected to experience; 4) periodic evaluation of emotional development during training; 5) participation in an intensive personal group; 6) selective assignment to stressful responsibilities; 7) recognition of crisis situations, e.g., a patient suicide or organizational disorder; 8) prompt referral for treatment, preferably without financial burden to the resident; and 9) anticipatory exploration of the heavy demands and relative isolation of private practice.

Perhaps the most pertinent question of all is: What can be done during the years of residency to prepare the psychiatrist to cope more readily with personal depletion and distress throughout the years following formal training, when he will be fully engrossed in his practice, carrying the burden of his patients' fears, angers, and self-loathings and separated from close personal contact with understanding colleagues? Following the deaths mentioned at the beginning of this paper, a psychiatrist in private practice wrote of his own experience of the personal cost of helping others: "Medical school and psychiatric training didn't teach us to take care of ourselves, to be sensitive to our own needs and give them priority equally with those of our patients."

The helper needs to learn to help himself and to ask help from others. Simon (20) urged that doctors should have an annual "emotional health check-up" comparable to the regular physical examination they recommend to their patients. Explicit attention in residency training to the young psychiatrist's emotional problems and resources for self-care may encourage him to overcome tendencies toward self-isolation and denial of personal difficulties and needs. But, as Halleck and Woods (6) and Ross (4) have emphasized, efforts to prevent physician suicide must begin in medical school. As early as possible the doctor-in-training should learn how to explore his own inner conflicts and unsatisfying social interactions and to work with others in effecting constructive personal change. Either in medical school or residency a place should be given in the curriculum for introducing the related disciplines of suicidology and crisis intervention, with the expectation that recognition and treatment of acute stress reactions, depressive illness, and suicidal behavior will be of both professional and personal benefit to the resident.

An important issue, one that appears to be still moot in psychiatric circles, concerns the appropriateness and method of active intervention when a colleague shows signs of serious depression or expresses—directly or indirectly—a self-destructive bent. Ross has urged that:

> To make prevention more than a pious hope, students and faculty must be more keenly alert and become more effective interventionists. . . . If physicians exercise enlightened compassion with regard to mental illness in their fellow physicians, they will not be reluctant to intervene when necessary, without becoming overprotective or callously rejecting him (4, pp. 192, 195).

For the profession, then, the question remains: What are the responsibilities of friendship and partnership to the emotionally disturbed physician colleague?

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Suicide and Newspapers: A Replicated Study

BY SOL BLUMENTHAL, PH.D., AND LAWRENCE BERGNER, M.D.

To determine the importance of imitation in the act of suicide, the authors replicated a study by Motto that dealt with the relationship of suicide rates to the cessation of newspaper publication caused by a strike. Using the population of New York City during a partial newspaper strike, they compared the rates of suicide during this period with the rates during identical periods of three preceding years and two subsequent years. They found that while the overall suicide rate was not significantly reduced, the suicide rate of young women under age 35 was lower.

THE IMPORTANCE OF IMITATIVE behavior in the act of suicide has been considered since ancient times. Durkheim (1) suggested that if this imitative factor were significant, suicide should vary with the importance newspapers have in public opinion. He acknowledged a lack of "established facts" but reached the conclusion that the existence of such a relationship is unlikely. Motto (2) has recently reported evidence of imitative behavior in suicide related to the availability of newspapers in Detroit. Previously, Motto had failed to detect a relationship between the suicide rate and the cessation of newspaper publication in seven large cities in the United States (3).

During the Detroit newspaper strike lasting from November 17, 1967, to August 10, 1968, there was a reduction in the number of suicides among women; the number of suicides among men was not significantly different. The existence of a relationship between newspaper reporting and suicide would have important implications for understanding the dynamics of suicide and its possible prevention. It was therefore decided to attempt to replicate the Detroit study in New York City.

The problem was approached by using a population as its own control; its suicide rate during a period when newspaper publication had ceased was compared with its mean rate of suicide for the identical period in the preceding three years. In Motto's study of Detroit data a four-year mean was used.

New York City has had two major newspaper strikes, one from December 8, 1962, to March 31, 1963, and the other from April 24, 1966, to September 11, 1966. The earlier strike was included in one of Motto's studies (3) in which no differences were found.

It is with the latter 140-day strike, "the longest labor shut-down in American newspaper history" (4, p. 47), that this study is concerned. While the duration of this strike was shorter than the 268-day strike in Detroit, it

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was felt that the number of suicides in New York City is large enough that random and sampling variations would be kept to a minimum.

Unlike the complete suspension of all newspaper publication in Detroit, this strike in New York City was not complete but affected half of the six newspapers that were then in operation. In that the situation in New York was not truly comparable to the one in Detroit our attention was turned to the effects of this long and partial cessation of newspaper publication on the suicide rate. The three newspapers affected by the strike provided about 30 percent of the total daily circulation in New York City and 20 percent of the weekend circulation. The three operating newspapers did not increase their circulation to the extent that they acquired the entire readership or circulation of the other three newspapers. In fact, it seems that there was a decline in total newspaper circulation after the strike had been concluded (5, 6). The sharp reduction in readership during the newspaper strike and its possible effect on the suicide rate is the focus of this study.

METHOD

The age and sex of those persons who committed suicide during the newspaper strike of April 24, 1966, to September 11, 1966, as well as the method they used, were determined; the suicide rates of age- and sex-specific groups were calculated and restated as suicide rates per 100,000 per year. The same data were obtained and the rates similarly determined for the identical period for each of the preceding three years, the mean of those years serving as the expected rate of suicide for the strike year. These data also served to determine whether a discernable trend might alter the expected figure for the strike year. The same procedure was then followed for the two years subsequent to the strike year for further comparison.

The total population of New York City did not change to any appreciable extent during the period 1963–1968. The U.S. Census reported the population of New York City to be 7,781,984 in 1960 and 7,895,563 in 1970. However, a comparison of age- and sex-specific groups in 1960 and 1970 showed considerable change so that it was necessary to perform linear interpolation between the 1960 and 1970 census for age-sex groups. These interpolated figures were used in computing rates.

RESULTS

The number and rates of suicide during the newspaper strike and during the corresponding three-year periods and subsequent two-year periods are summarized in table 1. The number of suicides as well as the rate are included to indicate the sample size from which our inferences are drawn. In those younger than 15, the small number of suicides (eight during the six years examined) did not permit meaningful comparison; this age group is thus not represented as a separate column in table 1 although it is included in the "all-ages" category.

The overall rate during the strike (11.7) was not significantly lower than the mean rate for the preceding three years. It fit well into the overall declining trend of the three preceding years, and the percentage of the observed change from the previous year was within the range of prior fluctuation. Similar findings were noted when men and women were examined separately.

The rates for specific age groups showed no consistent change during the strike. A comparison of combined age- and sex-specific groups revealed no consistent reduction in the number of either male or female suicides in any age group. The suicide rate during the strike fell within the range of prior fluctuations for three same-age groups of men and two same-age groups of women. These sex-age groups, which were outside the range of prior fluctuations, were almost evenly divided between new highs and new lows.

Motto employed the Wilcoxon Matched-Pairs Signed-Rank Test, a nonparametric test that takes into account both the direction and magnitude of observed changes. If the male and female populations of New York City are considered separately and if each age group is used to form matching pairs (three-year mean rate and rate during the strike), applying this nonparametric test to the New York City data would indicate that the changes in the male and female suicide rates during the strike are not statistically significant.

Examination of data for the two years following the strike indicates that the overall suicide rates continued to decline and were less than both the three-year mean rate and the strike period rate. Similarly the rates for men as well as the rates for women declined during the subsequent years and were less than the three-year mean rate and the strike period rate. Comparison of age-specific groups revealed no consistent changes from the strike year, with the rate of three age groups increasing and that of three decreasing in subsequent years. Combined age- and sex-specific group comparison revealed no consistent pattern either for men or for women.

It should be noted that for women in the younger age groups, 15–24 years and 25–34 years, the suicide rates during the strike period were the lowest in the six years studied, fell below the prior range of fluctuation, and were followed by an increased rate in the subsequent year. The subsequent increase may be important in view of the overall downward trend in suicide rates. It was pointed out in the Detroit study that a reduction in the suicide rates of women was observed "especially in the age group under 35." This finding is of interest because it occurred both with the complete and the partial cessation of newspaper publication.

DISCUSSION

In this study we did not find any relationship between the suicide rate and the partial cessation of newspaper publication in New York City from April 24–September

TABLE 1
Number and Rate** of Suicides by Age, Sex, and Year*

Year and Sex	15–24		25–34		35–44		45–54		55–64		65 and Older		All Ages***	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
1963														
Men	21	10.7	39	19.3	37	19.7	45	23.7	52	30.8	54	36.7	248	16.9
Women	15	6.8	31	14.3	26	12.1	26	11.8	28	14.6	40	21.1	167	10.3
1964														
Men	25	12.8	38	19.4	34	18.9	30	16.6	41	25.3	47	32.8	215	15.2
Women	12	5.5	19	9.0	16	7.8	20	9.5	19	10.2	28	14.9	115	7.3
1965														
Men	32	15.5	30	14.9	43	23.5	29	15.8	42	25.4	51	34.2	229	15.7
Women	14	6.1	23	10.6	20	9.6	19	8.8	30	15.6	37	18.7	143	8.8
Mean 1963–1965														
Men	26	12.9	36	17.7	38	20.5	35	18.6	45	26.9	51	34.3	231	15.8
Women	14	6.1	24	11.2	21	9.8	22	10.0	26	13.4	35	18.1	142	8.8
1966 (strike)														
Men	26	12.3†	42	20.8††	36	20.0†	23	12.8†	40	24.4†	52	34.7††	220	15.1†
Women	10	4.2†	14	6.4†	26	12.7††	22	10.3††	35	18.2††	33	16.3†	140	8.6†
1967														
Men	26	12.0	36	17.8	47	26.5	23	13.0	37	22.9	37	24.6	207	14.2
Women	13	5.4	18	8.2	24	12.0	22	10.5	14	7.3	24	11.7	115	7.0
1968														
Men	30	13.9	44	21.8	30	17.7	31	18.4	30	19.3	42	28.6	208	14.7
Women	21	8.7	14	6.6	24	12.5	22	10.9	17	9.1	30	14.7	129	8.1

*Number of suicides from April 24 to Sept. 11 in each year examined.
**Rate is corrected for suicides per 100,000 per year.
***Includes those younger than age 15, a total of eight during the six years examined.
†Rate is lower than in 1963–1965.
††Rate is higher than in 1963–1965.

11, 1966. The findings are consistent with Motto's study of seven large cities (3) but contrast with his study of complete cessation of newspaper publication in Detroit (2). This difference in findings may be attributed to the lack of complete cessation of publication in New York City.

Within a radius of 75 miles of the Empire State Building there are 12 television stations in the city's core, 19 TV stations on the fringes of the area, 72 AM radio stations, 71 FM radio stations, 54 daily newspapers, 285 weekly or biweekly newspapers, 38 foreign-language or ethnic newspapers, and 28 magazines with a circulation in excess of 100,000 in the metropolitan area (7).

Although one may speculate that daily newspaper reports and photographs have a unique quality and emotional impact, they are certainly not as dominant in reporting suicide as they have been in the past.

Like the Detroit study, our study took place during a gradual decline in suicide rates. Such a decline was occurring while there were major shifts in the composition of the New York City population. In 1966, whites, who make up a majority of the city's population, were for the first time outnumbered by blacks and Puerto Ricans in the public-school population. Comparison of the populations in the 1960 and 1970 censes showed a decline in those aged 35–64 years. This shift to a younger population with a different ethnic composition could account for the general decline in suicide rate. While the nonwhite population was also increasing in Detroit, the age- and sex-specific population in that city are reported to have shown little change. If there were sizable population shifts in Detroit (census data were not available to Motto at the time of his study), then one might expect differences in the computed rates.

The possibility that newspaper reports could be responsible for triggering potential suicide victims had been posed as early as 1845 by A. Brigham (3, p. 252) and has been speculated on ever since (8). While it may be possible to cite examples where triggering could have taken place, it has not been established that newspapers were directly responsible. If suicide is contagious (9), there must be many different sources of contagion. Friedman (10) and others (8, 11) have pleaded for the suppression of sensational newspaper reporting in order to reduce the occurrence of suicide. Even if the triggering theory were correct, in the current social and communications climate would not other triggering mechanisms also come into play?

Weighing the doubtful and very slight possible advantages of reducing the number of suicides against the price of suppressing all judicious publicity, Durkheim (1) believed that imitation (of a suicide) does not occur often enough to affect the suicide rate of a given society. In fact, there is hardly anything that any individual can do that will affect the collective life. "Thanks to the almost unanimous and generally ancient predominance of collective states, they are far too resistant to be offset by an individual innovation." This view is supported by the "40

percent increase in suicides in Los Angeles during the month of the suicide of Marilyn Monroe in August 1962 without significant change in the yearly suicide rate" (3).

A more current theme, and one that criticizes Durkheim's position, is that the mass media are responsible for inculcating in suggestible individuals a wide spectrum of antisocial thoughts with the consequence of antisocial behavior (suicide, crime, drug addiction, etc.)(11).

We must conclude that there is no firm and consistent evidence that suicide prevention will be enhanced by influencing the newspapers to reduce the emotion-laden reporting of suicides.

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Suicide and the Right to Die

AT LEAST ONE recent court case has upheld a patient's right to freedom from unwanted intervention in the process of dying. Medical societies across the country are publicly supporting carefully considered decisions to limit intervention in terminal illness. Excesses of therapeutic zeal, bred of a burgeoning life-support technology, are giving way to a more careful consideration of the patient's humanity. At the same time, euthanasia receives little public support. The deliberate induction of death is foreign to the spirit of medicine. But we are once again becoming aware of the mortally ill individual's right to die with dignity.

Physicians know full well they cannot prevent death. They can only postpone it. Where death is imminent—and every clinician knows that judgment is fugitive at times—the questions are when and how, not whether. Suicide, or the threat of it, raises the question of *whether*, in the sense that death is not otherwise near. Symposia, panel discussions, and debates have been held on the question of the individual's right to suicide. But the assertion of such a "right" leaves out of consideration what is known about those who have taken their lives. So-called "rational" suicide is a rarity. Only a few persons who commit suicide are suffering from a terminal illness (and may perhaps be excluded from the discussion that follows). The descriptive facts are that most persons who commit suicide are suffering from clinically recognizable psychiatric illnesses often carrying an excellent prognosis; that the majority have sought help from physicians for their symptoms; and that few have received the indicated treatment. To say that this person is exercising a right is to mock him in his frustration at failing to find the understanding and the technical skill he sought.

To be sure, there are those who condemn any effort to interfere with an individual's behavior against his wishes. But their grounds are philosophical, not clinical, and foreign to our concerns as physicians. Others, in the hope of de-stigmatizing suicide, would establish "thanatoria" to facilitate, regulate, and sanitize the act. This idea seems to be the intellectual toy of frustrated would-be suicide preventers. There is much to be frustrated about. Our ability to predict suicide is still crude. Our ability to prevent suicide is at best unproven. The loss of federal support for research in these vital areas coincides with an unprecedented rise in suicide among the young. But suicide is not a topic on which to take the position: "If you can't beat them, join them!"

From our knowledge of the natural history of the psychiatric disorders underlying the suicidal urge, we can confidently predict recovery from that urge in the great majority of cases, when other symptoms of depression lift. The desire to terminate one's life is usually transient. The "right' to suicide is a "right" desired only temporarily.

In this section the Editor samples varied opinions on topical problems. The opinions expressed herein are not necessarily those of the Editor, nor can they in any way be construed as marking the official policy of the Journal.

Every physician should feel the obligation to support the desire for life, which will return even in a patient who cannot believe that such a change can occur. To cooperate in the patient's hopelessness violates an important responsibility of the physician.

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Kudos

ALL EDITORS OF SCIENTIFIC JOURNALS have two baskets on their desks: one for bouquets, the other for brickbats. Unfortunately the latter is usually full, while the one for bouquets is sparsely populated. Therefore when a number of approving letters arrive at his desk, an editor is tempted to make Brownie points by publishing them. Until this time we have refrained from this reaction, but now a series of notes about our new format has led us to abstract and publish some of them herewith. First a telegram:

"Congratulations on your new dress. January issue more impressive than ever. Best wishes and bouquets to all."

Then letters:

"I think the new format of the *Journal* is a vast improvement and extremely good."

"I'm moved to write this letter after picking up the current issue of *The American Journal of Psychiatry*. It is now an even more impressive-looking journal and a delight to read in its spacious, wide-column format. Thank you for changing the *Journal* in this way. Also, I am pleased that you continue to keep the advertising separate and away from the text."

"Congratulations on the contemporary format of the *Journal*, Volume 130, Number 1. It is destined to become a collector's item."

"I might say . . . that the *Journal* has, to me, had a drastic positive change under the present leadership. . . ."

"Just a word of congratulations on the format of the first issue of Volume 130 of *The American Journal of Psychiatry*. It is a very convenient size and the print is easily readable. The editors have been doing a fine job."

For these and various congratulatory comments, our sincere thanks.

F.J.B.

BRIEF COMMUNICATIONS

A New Framework for Baccalaureate Careers in the Human Services

BY ROBERT M. VIDAVER, M.D., AND JAMES E. CARSON, M.D.

An articulated human service career "lattice," utilizing three two-year modules, has been developed in Maryland, extending from community college mental health associate programs through baccalaureate and master's degree modules. Graduates of the several curricula work in a variety of community mental health, institutional, and family service roles linked with appropriate civil service classifications. Completion of an educational component qualifies the graduate for the next higher employment role, and, similarly, promotion becomes the ticket of admission to the next academic rung.

IN THE PAST HALF-DOZEN YEARS undergraduate training programs preparing students for mental health careers have become commonplace. Yet in spite of the burgeoning of two-year community college programs (1) and the inauguration of several notable baccalaureate curricula in the social work-psychology fields, few linkages operate across the differing academic levels or connect with the traditional graduate programs. Thus noncollege "new career" programs and associate-degree, baccalaureate, and graduate curricula proliferate independently. Career mobility for the new manpower is impeded, as is their continuing professional education. Their relationship to psychiatry becomes obscured in the process.

In an attempt to ameliorate some of these problems, the Maryland Department of Mental Hygiene, in consort with Morgan State College and five Maryland community colleges, has sought to develop a unified system of human services education. This "lattice" extends from secondary school through three collegiate levels—certificate (one year), Associate of Arts degree, and Bachelor of Science degree—and then articulates with both traditional and nontraditional master's programs.

Antecedents date back to the department's initial tooling up for comprehensive community mental health between 1964 and 1966. Early in the planning of Maryland's centers it became obvious that personnel needs could not be met solely by graduates trained in the traditional professional schools. Not enough students were enrolled and there were too few clinical programs. Nor could the public sector afford the costs of professional salaries as positions multiplied in proportion to the opening of active treatment centers. As the locus of services moved from the custodial institutions to neighborhood centers, large numbers of persons with psychodynamic skills were needed. Fortuitously, reports of successful unorthodox approaches by Rioch and associates (2), Elkes (3), True (4), and Peck and associates (5) and the new careers movement encouraged the department to "think innovative" (6). Wellner (7) had already demonstrated a receptivity among Maryland agencies toward such new manpower types. Abetted by the Southern Regional Education Board's NIMH-supported Community College Mental Health Workers Project (8), the department chose a collegiate vehicle for the training of the new workers.

Consequently, a two-year course of study was formulated by one of us (R.M.V.) (9) and introduced under Kurland's (10) direction at the Catonsville Community College in 1967. Concurrently a parallel curriculum was developed by Schulman (11) at the Community College of Baltimore. Three additional colleges—Essex, Montgomery, and Anne Arundel Community Colleges—instituted comparable curricula between 1968 and 1970, affording accessibility to some three-fourths of the state's population. Simultaneously the department developed civil service job classifications and budgeted positions (see table 1), along with work-study arrangements for the department's employees.

Underlying the structure of the new curricula was the belief that, much as in nursing, beginning professional skills in the human services could be taught at the community college level. The term "beginning professional" deserves special emphasis. It was anticipated that graduates might carry out uncomplicated professional tasks under supervision, adding gradually to their range of re-

Read at the 124th annual meeting of the American Psychiatric Association, Washington, D.C., May 3–7, 1971.

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TABLE 1
Career Lattice Salary Ranges: Interrelationship of Traditional and Nontraditional Workers

Position	Maryland Salary Grade*									
	3 $4,910– $6,472	4 $5,401– $7,097	5 $5,941– $7,806	6 $6,535– $8,587	7 $7.189– $9.446	8 $ 7,617– $10,009	9 $ 8,378– $11,007	10 $ 9,217– $12,110	11 $10,139– $13,321	12 $11,153– $14,654
Psychiatric Aide I, Sr.	X	X	X							
Licensed Practical Nurse (Psychiatric Aide III, IV, V)				X	X	X				
Registered Nurse I–IV						X	X	X	X	X
Mental Health Associate I, II, III**				X	X	X	X			
Mental Health Specialist I, II** (B.S. degree)								X	X	
Mental Health Specialist II, III** (M.S. degree)									X	X
Psychologist I, II, III (M.S. Psychologist)							X	X	X	X

*Salary range based on authorized schedule beginning January 1, 1972.
**As proposed.

sponsibilities as they gained experience. Education of mental health associates has been described elsewhere (1, 9, 12); it is enough to mention here the integration of background behavioral sciences with practicum responsibilities from the first year onward. Students rotate through a variety of institutional and community roles under direct faculty supervision.

Representative of the jobs taken by the early graduates are the following: consultant to the faculty of a Baltimore junior high school, family therapist in association with a privately practicing psychiatrist, "caseworker" on a crisis intervention team, group therapist on a locked adolescent drug ward, and family counselor for a county outpatient clinic. Three associates as a team developed a primary mental health care program for a rural county; others established a behavior modification token economy ward in a state hospital; another associate returned as a full-time faculty member of a college teaching team.

Also noteworthy has been the utilization of graduates by practicing psychiatrists in the team care of patients under Maryland's Medicaid program. Psychiatrist-associate groups have moved to develop mental health "packages" appropriate to the needs of evolving health maintenance organizations (HMOs). Nonetheless, the professional education of the associates is incomplete at the point of graduation. For some, continued professional growth will follow naturally under the supervision of the professional colleagues with whom they work. For others, career mobility or lateral movement into related human service specialties—alcoholism, child care, services to the aged—presents real problems. Mental health associates were not conceived of as comprising a new profession, with its own discrete role, or as a special breed of perennial assistants. They are beginning clinicians who are expected to grow professionally at differing rates and to varying degrees in the course of their clinical work over the next ten, 20, or 30 years. The quality of their continuing professional education takes on particular importance exactly because they are an unfinished, albeit malleable, product at graduation. To ensure the availability of sound, clinically based continuing education the second module of Maryland's three-stage educational lattice was opened at Morgan State College, Baltimore, in September 1970.

The Morgan State curricula, like the community college programs, initially lasted two years; they began, however, where the community college left off. (At first open only to graduate mental health associates transferring in at the junior-year level, the Morgan programs have subsequently developed freshman-sophomore modules identical with the community college curricula.) The Morgan programs are a series of parallel two-year modules whose completion leads to the Bachelor of Science degree. There are three baccalaureate modules: community mental health, child care/educateur, and neighborhood center administration. Other modules under discussion include drug abuse-alcoholism counselor, mental health nursing, and corrections/probation counselor. Each of the modules has its own educational and professional goals and separate courses of study.[1] (See appendix 1.)

There is a common core underlying all third-year clinical coursework and there are shared electives in the fourth year. The two-year modules include 32–36 semester hours in professionally supervised clinical work (one

[1] Tables are available from Dr. Vidaver giving details of the curriculum for the upper division baccalaureate program for Child Care Specialist/Educateur and for the upper division baccalaureate/master's program in Neighborhood Health Center Administration.

semester hour of practicum translates into three actual hours per week in the field); 12–16 hours in advanced behavioral sciences; and 12–16 credit hours of additional general education required by Morgan for the B.S. degree.

Despite the seeming narrowing of professional focus during the senior year, we consider graduates of the Morgan program to be generalists. In the community mental health curriculum, for instance, the students' clinical experience runs the gamut of the human services, from asylums, jails, nursing homes, and halfway houses to orthodox psychiatric outpatient departments, HMO operations, and that host of institutions—e.g., schools, neighborhood action groups, police, senior citizens' centers, recreation programs—where they learn the art of consultation. Within their target community they serve a broad spectrum of individuals whose difficulties span the spectrum of classic diagnostic categories.

THE NECESSITY OF BACCALAUREATE PROGRAMS

Are the baccalaureate programs necessary, particularly in view of the success of the community college programs? Conversely, is a baccalaureate rung justified vis-à-vis our well-developed graduate system (and the tightening job market for master's graduates)? We believe it is justified because the baccalaureate programs serve as a critical link between expanding community college programs and the traditional graduate schools. We believe the ultimate value of the undergraduate mental health worker curricula lies not so much in their generation of new middle-level "assistants," but, rather, in their appeal to "middle-American" youth, many of whom will continue upward on the career ladder, forming a constant source of new professionals comprised of persons heretofore lost to the human service professions. Were the community college programs to prove a dead end, few persons of real talent would choose to enroll. The appeal of the new programs is their open-endedness. A guarantee of the quality of their continued professional growth may, for many, depend on the availability of articulated academic steps. Similarly, later entry into graduate school may hinge on the validity of their upper division baccalaureate education and credentials. Their number is large. Between 1972 and 1975 Maryland's five community college programs will graduate some 120 to 160 mental health associates annually. Perhaps a fourth—30 to 40 graduates—will move directly into upper division curricula. Of the remaining 80 to 110 graduates each year choosing employment, we anticipate that over half (40 to 60 Associate of Arts degree holders) will at varying times in their careers reenter college, either part-time or full-time, to pursue their B.S. degrees.

The reason, then, for the baccalaureate programs is the improbability of the typical community college mental health worker's having access to sound continuing education where he works. While he will have supervision, opportunities for learning new and quite different skills or for taking on higher levels of responsibility may be lacking. Large public institutions have neither the senior staff available for this work nor the proper community models. Smaller, decentralized "storefront" centers lack the diverse staff needed to cover many specialized fields at many educational levels simultaneously. Indeed, indigenous community institutions using the associates in liaison and consultant roles (courts, schools, neighborhood improvement associations) are entirely without expert faculty. Mere exposure is a poor teacher. The baccalaureate programs may function as educational clearinghouses, conserving scarce faculty and practicums and ensuring the continuing availability of a breadth of academic alternatives and levels suited to the heterogeneous needs of the new workers. In addition, the interlacing of core and common electives makes possible lateral movement from one area to another without a waste of academic or experiential skills. Part-time and extension curricula allow for uninterrupted growth without terminating employment—in effect upgrading the employing institution's overall staff competence without reducing its staff numbers.

The second advantage of the bachelor's programs is that they offer an alternative route to professional excellence. That is, while many have advocated the development of middle-level personnel—i.e., motivated and intelligent persons suited to the tedious (and largely unrewarding) aspects of the professional's routine—the concept is unsuited to the existing labor market. No one (or at least not the kind of individual capable of handling sensitive mental health responsibilities) wants to be a perennial assistant.[2] There is strong competition from other careers, many of them available via community college training. Manpower flow, the idea if career-long job mobility, was postulated as a means of attracting persons to these middle-level jobs but without penalizing them against possible future development into full professional status (13). As long as lower echelon jobs were to become stepping stones to a variety of professional roles, then starting at the bottom wouldn't be demeaning or recruitment inhibited. In turn, once there is a flow of middle-level persons upward, new recruits will be attracted into the college programs to replenish their numbers.

If the two-year curricula offer an easy way into beginning professional careers, then the B.S. programs operate to ensure a multiplicity of professional options later. The A.A. graduates are not forever pigeonholed into a single

[2] America has become a "collegiate" nation. By 1980, some 70 percent of all high school graduates will continue on to college. In the human services the word "professional" is synonymous with graduate education. For the foreseeable future, associate degree workers will occupy but a small fraction of the total human services professional pool. The traditional professions, and their continuing flow of new graduates, will act to maintain the status quo. It is a sad truism that nobody relinquishes a position of relative status voluntarily. What leverage has the new noncredentialed breed with state bureaucracies, civil service commissions, medical societies, and the like? Equality of opportunity for the nontraditional workers entails access to the same educational ingredients that go to make today's professional well trained. In fact, the existence of baccalaureate modules makes possible delineation of challenge exams for specific clinical skills without diluting the basic standards of the professions. Equally important, individuals otherwise well qualified might select pieces from the larger curriculum to fill out conspicuous voids in their educational backgrounds.

task-oriented role. Moreover, the bachelor's degree fits in well with most civil service job classification systems, making for improved lateral and upward career mobility. The Maryland Department of Mental Hygiene anticipates an umbrella classification for baccalaureate workers under the titles of Mental Health Specialist I and II, with salary ranges of $9,217 to $12,110 and $10,139 to $13,321, respectively (see table 1).

A third reason for the bachelor's programs lies in their concentration on skills pertinent to the needs of specific populations. Until recently, specialization has been intradisciplinary. For example, psychiatrists choosing to specialize in children study from the perspective of psychiatric practice; psychologists seek to understand the child from their own, albeit overlapping, professional view; while educators use yet another. We suggest that such intradisciplinary approaches to learning run counter to evolving patterns of community services, namely the ascendency of programs to aid target populations—the elderly, alcoholics, children (12). Services become less oriented to pathology as ever-larger segments of the general population utilize mental health services of one kind or another. The delivery of services becomes increasingly a function of experts operating within the fabric of ordinary community life—schools, churches, courts, etc. The expertise needed in the human services spans the various traditional disciplines, each of which makes its own contribution to the whole. Similarly, the education of mental health personnel will become less "profession-centered" and more eclectic, with specialization reflecting the nature of the target—a phase in the life cycle (e.g., aging), a common problem (drugs), or economic status (poverty). The Morgan curricula aim in this direction.

MASTER'S DEGREE MODULES

As has been noted earlier, the Morgan curricula include a parallel series of master's degree modules; these are expected to be developed under an NIMH Experimental and Special Training grant award. The purpose of the graduate programs is threefold:

1. To prepare the baccalaureate graduates with special skills in teaching, clinical supervision, and administration (in their own fields);

2. To train graduates of other health and human service curricula in the several multidiscipline specialties offered (i.e., child care, center administration); and

3. To allow selected individuals of high promise to combine the latter two years of the B.S. degree with the two-year master's program, resulting in a three-year combined program for A.A. degree persons and a five-year program for beginning freshmen. (See appendix 1.)

As envisaged, progression from high school through the master's level is possible without losing a single academic credit via three articulated two-year modules (termed 2 + 2 + 2). Each of the modules—associate degree, baccalaureate degree, and master's—is a self-contained, complete unit, pedagogically viable in its own right. Each leads to advanced clinical roles commensurate with the graduates' newfound sophistication; each also leads to the next higher academic degree. Taken in sequence, the 2 + 2 modules are synergetic, the more specialized content of the upper division curricula expanding upon the more generalist community college (or lower division) module. But there is no pressure to move directly from module I to module II. Jobs are available. The completion of each module offers four options: 1) full-time work, 2) full-time school, 3) combined work and school under part-time arrangements, and 4) lateral shift into the traditional undergraduate or graduate human services programs.

While the sequence can be followed without interruption, it need not be. A person takes the next step, whether employment or schooling, only when it makes sense to him in terms of his own personal life, career goals, or family commitments. Many prefer to intersperse periods of full-time employment between academic modules (13). And for some this may prove the better education. The added time for decisions and the juxtaposition of work with schooling may well result in clinicians who are more mature and more at home with their final career choices (14).

Because the modules are separated by traditional college degrees, they act as juncture points facilitating lateral transfer between career fields or easy movement into jobs before a person invests six, eight, or more years in higher education. Our aim has been to construct a lattice of parallel jobs and their academic counterparts so that completion of the educational component qualifies the graduate for the next higher employment role and, similarly, so that promotion becomes the ticket of admission to the next academic rung. We hope that people will enter the lattice from a variety of levels and personal backgrounds and that they will then join a single, multipotential career mainstream. How far up or across the lattice should one go, and when? These would become personal decisions, yet also instantly renegotiable throughout one's career by way of the lattice articulations and options for lateral transfer.

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APPENDIX 1
Community Mental Health Curriculum: Upper Division Baccalaureate/Master's Program

THIRD YEAR (BACCALAUREATE)

Program Courses (credits in parentheses)

Community determinants of individual behavior (4)
Consultation and group therapies (4)
Humanities elective (3)
Speech (2)
Physical education (1)
American history (3 + 3)
Psychology of the exceptional child (3)
Sociology of the family (3)
Mental health electives (6–9 credits from third-year electives, below)
Total credits, two semesters = 34

Electives

Dynamics of health services organization (4, 4, 2)
Urban health problems (3)
Public and community health (3)
School hygiene and health problems—group solutions (3)
Community recreation (3)
Juvenile delinquency (3)
Criminology (3)
Activity therapies: vocational rehabilitation (4); recreational rehabilitation (4)

FOURTH YEAR/FIRST GRADUATE YEAR

Program Courses

Advanced seminars and field assignments (4 + 4)
Humanities elective (3)
Great issues (2)
Political science/economics elective (3)
Clinical electives (6–9 credits from clinical electives, below)
Applied social science elective (see applied social science electives, below) (3 + 3)
Adolescent/drug abuse elective (3)
(First-year graduate students take an additional 8–12 credits from second-graduate-year electives in lieu of Humanities, etc.)
Total credits, two semesters = 33

Clinical Electives

Behavior analysis and environmental design (4, 4)
Group dynamics: special treatment groups (4, 4)
The culture of drug abuse: rehabilitating the young offender (3, 3)
Children, the family, and the community (3, 3)
Community, family, and self-care approaches in retardation (4, 4)

Applied Social Science Electives

Collective behavior (3)
Government and social welfare (3)
Formal institutional structure (3)
Planned change in bureaucratic systems (3, 3)
Public opinion and propaganda (3)
Welfare as a social institution (3, 3)
Urban geography (3)

SECOND GRADUATE YEAR

Program Courses

Community subspecialty clerkships (12 credits from graduate electives, below) (6 + 6)
The community as a self-care system (3 + 3)
Elementary neurobiology (3)
Introductory psychopharmacology (3)
Public health elective (6 credits from public health electives, below) (3 + 3)
Total credits, two semesters = 30

Graduate Electives

Aging and chronic care (6)
Community-institutional articulation problems (6)
Comprehensive family health care (6, 6)
Mobilizing community resources; protest leadership (6, 6)
Alcoholism and suicide prevention (6, 6)
Corrections and parole; indigenous adolescent gangs (6, 6)
Drug abuse: ambulatory care; public and community approaches (6, 6)

Public health electives

Principles of health administration: introductory operations research (3, 3)
Levels of care and manpower utilization (3, 3)
Principles of epidemiology (3, 3)
Electronic data processing and records retrieval (3, 3)

Long-Term Treatment of Tardive Dyskinesia with Haloperidol and Tetrabenazine

BY HAJIME KAZAMATSURI, M.D., CHING-PIAO CHIEN, M.D., AND JONATHAN O. COLE, M.D.

Thirteen patients with tardive dyskinesia were treated with either haloperidol or tetrabenazine for 18 weeks. Haloperidol produced a statistically significant reduction in the frequency of oral dyskinesia, though the effect was most striking during the first two weeks; reversible extrapyramidal symptoms appeared to be negatively correlated with oral dyskinesia. Tetrabenazine also produced a significant reduction in the frequency of oral dyskinesia, with almost complete suppression in two patients throughout the study; the correlation between oral dyskinesia and reversible extrapyramidal symptoms was less clear than with haloperidol. No exacerbation of the dyskinesia was observed after administration of the study drugs was discontinued.

TARDIVE DYSKINESIA or persistent oral dyskinesia has been described as a potentially irreversible neurological condition not infrequently encountered in patients on prolonged neuroleptic therapy. It is characterized by involuntary bucco-linguo-masticatory movements, occasionally accompanied by choreiform movements of the extremities or trunk. A number of large-scale surveys of psychiatric inpatient groups have revealed a prevalence of this syndrome ranging from 2 percent to 30 percent (1–10). Tardive dyskinesia has caused special concern among psychiatrists because the dyskinetic movements appear to persist indefinitely after neuroleptic drugs have been stopped.

Although the condition is rarely severe or incapacitating, the abnormal movements, which are often readily observable, constitute a very undesirable long-term effect from a group of drugs that is otherwise both effective and essential in the treatment of schizophrenic patients.

Tardive dyskinesia has been linked to neuropathological lesions in the basal ganglia (11) and to an excess of dopaminergic activity in these same brain areas (7, 12–17).

At the time this work was done, the authors were all with Boston State Hospital, 591 Morton St., Boston, Mass. 02124, where Dr. Kazamatsuri was Research Fellow in Clinical Psychopharmacology, Dr. Chien is Director of Clinical Research, and Dr. Cole is Superintendent; Dr. Kazamatsuri is currently Professor of Psychiatry, Teikyo University School of Medicine, Tokyo, Japan. Address reprint requests to Dr. Chien at Boston State Hospital.

This work was supported in part by Public Health Service grant MH-16128 from the National Institute of Mental Health.

The authors wish to thank Robert Taylor, M.D., for his neurological evaluations of the patients and Hoffman-La Roche for supplying the tetrabenazine and placebo tablets for this study.

In earlier papers (18–20), we reported the marked short-term clinical efficacy of both a dopamine-depleting drug (tetrabenazine) and dopamine-blocking drugs (haloperidol and thiopropazate) in the treatment of tardive dyskinesia over an eight-week period of gradually increasing dosages of the drugs. These findings support the hypothesis that tardive dyskinesia may result from excessive dopaminergic activity in the brain. Several other investigators have reported that haloperidol (21), tetrabenazine (22, 23), thiopropazate (24, 25), reserpine (26, 27), isocarboxazide (28), or alpha-methyl-dopa (26) were effective in the symptomatic control of tardive dyskinesia. However, all of these trials were carried out over relatively short time periods. No satisfactory and effective long-term pharmacotherapy for tardive dyskinesia has been found to date.

The present paper reports the results of an 18-week study using both a dopamine-depleting drug (tetrabenazine) and a dopamine-blocking drug (haloperidol) for the treatment of patients with severe cases of tardive dyskinesia.

The purposes of the study were twofold. First, we wished to learn whether drugs that showed effective short-term suppression of dyskinetic movements would continue to manifest this effect when administered as maintenance therapy. Careful inspection of the data from our earlier studies leaves one with the impression that the stepwise dosage increases used may have served to maintain the suppression of dyskinetic movements that otherwise would have escaped from drug control. There is a widely held clinical belief that dyskinetic movements break through rather rapidly when they are suppressed by antipsychotic drugs. Second, we wished to determine whether the suppression of dyskinetic movements over a period of several months led to any appreciable exacerbation of the movements when the suppressant drug was discontinued.

SUBJECTS AND METHOD

Thirteen patients were selected for this study. They were all chronic psychotic inpatients at Boston State Hospital who manifested typical bucco-linguo-masticatory oral dyskinesia associated with long-term neuroleptic medication. All of them had been subjects in our previous studies (18, 19); detailed physical and neurological examinations had been completed prior to the initiation of the previous studies. There were eight men and five women, ranging in age from 41 to 63 years, with an average age of 55.8 years. The length of psychiatric

hospitalization ranged from 15 to 41 years, with an average of 29.3 years. Ten patients were diagnosed as chronic schizophrenics, two as mentally deficient, and one as having a chronic brain syndrome.

The 13 patients were divided randomly into two groups. In the initial phase, all neuroleptic and antiparkinsonian drugs were completely withdrawn and were replaced by placebo for the first four weeks. Other medications, such as antidiabetic or anticonvulsant drugs, were continued unchanged.

Seven patients received 4 mg. of haloperidol twice a day and six patients received 50 mg. of tetrabenazine twice a day. These dosages were determined on the basis of the findings in our previous studies, which indicated that the majority of the patients with oral dyskinesia responded favorably to either 8 mg. per day of haloperidol or 100 mg. per day of tetrabenazine. It was originally planned that these dosages would be held constant for 24 weeks. However, by the 12th week of the study, it became obvious that the marked reduction in abnormal movements observed during the first several weeks had not persisted for the majority of the patients; this was especially true for the patients receiving haloperidol.

A frequency count of mouth movements (18), done by a psychiatrist blind to the study design, was used to assess oral dyskinesia. The mean frequency of oral dyskinetic movements per minute was obtained at each evaluation. Evaluation was carried out weekly for the first four weeks of drug administration in the study and biweekly for the rest of the study period. Reversible extrapyramidal symptoms were rated biweekly by the senior author (H.K.) using a modified "bilan extrapyramidal" (29). The Nurses Observation Scale for Inpatient Evaluation (NOSIE) (30) was completed every six weeks by the ward nurses, who were also blind to the study design, to assess the ward adjustment of the patients.

RESULTS

Pre-Drug Placebo Period

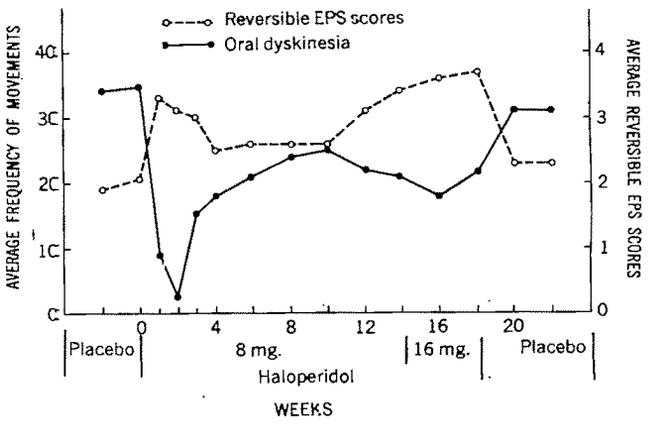
During the four weeks of the pre-drug placebo period, all the patients manifested typical bucco-linguo-masticatory dyskinesia. The average frequency of oral dyskinetic movements per minute was 34.9 in the haloperidol group and 25.7 in the tetrabenazine group. Little change occurred in either oral movements or reversible extrapyramidal symptom scores during the four-week pre-drug placebo period.

Clinical Efficacy of Haloperidol

Seven patients were given haloperidol at the daily dosage of 8 mg. At the end of the second week, oral dyskinetic movements had completely disappeared in five out of seven patients and were markedly reduced in the other two patients. The average frequency of oral movements was 2.4 per minute. At the end of the fourth week, complete suppression of oral dyskinesia was still observed in four patients. In the other three patients, however, the

FIGURE 1

Changes in Frequency of Oral Dyskinetic Movements and Reversible Extrapyramidal Symptoms During Administration of Haloperidol (N=7)



frequency of oral dyskinesia had returned almost to the levels observed prior to administration of haloperidol. The average frequency of oral movements for all seven patients was 18.0 per minute.

At the end of the eighth week, although complete disappearance of dyskinesia was still observed in two patients, marked suppression of dyskinesia was no longer seen in the other five patients. The average frequency of oral movements was 24.1 per minute. At the end of the 12th week on haloperidol, all the patients manifested oral dyskinesias, even though the average frequency of oral movements was still significantly lower than that observed during the pre-drug placebo period (21.8 versus 34.9, $p < .01$).

Starting at the 15th week, the daily dosage of haloperidol was doubled to 16 mg. Two weeks after the increase in dosage, three patients showed considerable reduction in the frequency of oral dyskinesia. Two other patients, however, developed severe malaise and appeared not to be able to tolerate 16 mg. of haloperidol; the drug was discontinued. The remaining two patients did not show any improvement in oral dyskinesia. Replacement of haloperidol by a matched placebo in the 19th week resulted in a rapid reappearance of oral dyskinesia, with the frequency rising to approximately the pre-drug level in all patients.

Table 1 depicts the clinical efficacy of haloperidol in treating oral dyskinesia, and figure 1 illustrates the changes in frequency of both oral dyskinesia and reversible extrapyramidal symptoms. Comparison of each treatment period with the baseline period by paired t test revealed that haloperidol administration was associated with a statistically significant reduction in the frequency of oral dyskinesia, even though its antidyskinetic efficacy was most striking during the first two weeks.[1] Reversible extrapyramidal symptoms appeared to be negatively cor-

[1] Details of these comparisons and their statistical significance, as well as those for tetrabenazine, may be obtained on request from Dr. Chien.

TABLE 1
Comparison of the Clinical Efficacy of Haloperidol and Tetrabenazine in Treating Oral Dyskinesia

Rate of Reduction of Oral Dyskinesia	Week*								
	2	4	6	8	10	12	14	16	18
Haloperidol group (N=7)									
100 percent disappearance	5	4	2	2	0	0	0	0	2
50–99 percent disappearance	2	0	1	0	3	2	2	3	0
0–49 percent disappearance	0	1	3	2	2	5	5	3	2
Worsening	0	2	1	3	2	0	0	1	1
Dropout	0	0	0	0	0	0	0	0	2
Tetrabenazine group (N=6)									
100 percent disappearance	2	2	2	2	1	2	2	2	2
50–99 percent disappearance	0	2	1	1	2	1	0	1	0
0–49 percent disappearance	3	2	2	2	2	2	3	3	3
Worsening	1	0	1	1	1	1	1	0	1

*The dosage for weeks 2–14 was 8 mg. of haloperidol or 100 mg. of tetrabenazine; for weeks 16 and 18 it was 16 mg. or 200 mg., respectively.

related with the changes in frequency of oral dyskinesia ($r = .6292$, $p < .02$).

Clinical Efficacy of Tetrabenazine

There were no dropouts among the six patients who received tetrabenazine. At the end of the second week, oral dyskinesia had completely disappeared in two patients and was unchanged in the other four patients. As shown in table 1, this split remained almost constant throughout the 14 weeks during which the patients were receiving 100 mg. per day of tetrabenazine. The average frequency of oral movements was reduced from 25.7 to 12.8 at the end of the second week, then increased to 16.8 at the end of the sixth week, and stayed at almost this same level until the 15th week (see figure 2).

The dosage increase of tetrabenazine to 200 mg. per day at the 15th week produced a slight reduction in average frequency of oral dyskinesia. This effect, however, appeared to be a transient one, since an increase in oral dyskinesia was observed at the 18th week, i.e., four weeks after the dosage increase. The replacement of tetrabenazine by a matched placebo resulted in a rapid return of oral dyskinesia to the levels observed during the initial placebo period. During the 18 weeks of tetrabenazine medication, no significant side effects were observed.

The comparison of each treatment period with the baseline period by paired t test revealed that tetrabenazine administration was associated with a statistically significant reduction in the frequency of oral dyskinesia. The correlation between oral dyskinesia and reversible extrapyramidal symptoms was less clear than in the haloperidol group ($r = .4149$, $p < .20$).

Changes in Ward Behavior

NOSIE ratings were available for six out of seven patients in the haloperidol group and for all six patients in the tetrabenazine group. Although some slight changes in the patients' ward behavior occurred during the course of the study, there was neither clear deterioration nor clear improvement in either treatment group.

DISCUSSION

Studies of drug treatments for tardive dyskinesia involve serious ethical issues. The only kinds of drugs known to suppress dyskinesia reliably are either neuroleptic drugs (e.g., phenothiazines, butyrophenones) or amine-depleting agents (e.g., reserpine, tetrabenazine). In the present study, the aim was to determine whether drugs we had previously shown to suppress dyskinetic movements (haloperidol, tetrabenazine) would be as effective over an 18-week period as they had been over an eight-week period. Haloperidol has been claimed to cause tardive dyskinesia (31–33). Tetrabenazine has not been so implicated, though reserpine has (34).

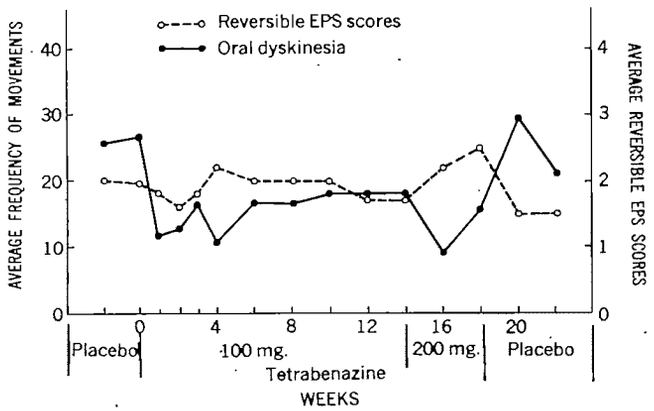
Since eight-week studies had not led to any worsening in the dyskinesia of the study patients, and the need for a safe and reliable drug to suppress dyskinesia was clear, our ethics committee felt comfortable in approving an 18-week study if it was followed by a placebo period in which adverse effects on the abnormal movements could be determined. Since tardive dyskinesia usually appears after years of neuroleptic drug treatment, it seemed safe to assume that 18 additional weeks of such treatment would not cause any significant change in the underlying disorder.

As the results show, the two treatments did not, in fact, harm the patients. Unfortunately, neither did the treatments prove to be particularly useful in suppressing abnormal movements over an 18-week period. The initial suppression achieved did not persist, and even a doubling of the dosage in the latter phases of the study did not result in optimal suppression. Haloperidol was more effective than tetrabenazine early in the study.

At the present state of knowledge, no specific therapy for tardive dyskinesia can be recommended, although the withholding of all antipsychotic medications for prolonged periods (or the use of such agents in the smallest amounts that will prevent major exacerbations in the patient's psychosis) appears to be the wisest strategy.

FIGURE 2

Changes in Frequency of Oral Dyskinetic Movements and Reversible Extrapyramidal Symptoms During Administration of Tetrabenazine (N=6)



CONCLUSIONS

In order to determine whether dopamine-blocking and dopamine-depleting drugs, which had shown effective short-term suppression of oral dyskinesias in our earlier studies, would continue to manifest this effect when given as maintenance therapy, and whether suppression of dyskinetic movements over a several-month period would lead to any exacerbation of the movements when the suppressant drug was discontinued, we treated 13 patients who had tardive dyskinesia with either haloperidol or tetrabenazine for 18 weeks.

Seven patients were treated with haloperidol (8 mg. per day for 14 weeks and 16 mg. per day for a subsequent four weeks). The clinical efficacy of haloperidol in suppressing oral dyskinesias was observable during the entire medication period, although a striking effect was noticed only in the first few weeks.

Six patients were treated with tetrabenazine (100 mg. per day for 14 weeks and 200 mg. per day for a subsequent four weeks). Tetrabenazine produced almost complete suppression of oral dyskinesia in two patients at a daily dosage of 100 mg. for 14 weeks, without the tendency to relapse during the study period that all the haloperidol patients had shown. A dosage increase to 200 mg. per day produced further suppression of oral dyskinesia in another two patients without any severe side effects.

The suppression of oral dyskinesias appeared to be accompanied by a simultaneous development of reversible extrapyramidal symptoms in the haloperidol group. This apparent inverse correlation was less evident in the tetrabenazine group. No exacerbation of dyskinesia was observed after the drugs were stopped and the patients were returned to placebo medication.

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Alcoholism Among Methadone Patients: A Specific Treatment Method

BY IRA LIEBSON, M.D., GEORGE BIGELOW, PH.D., AND RONALD FLAMER

Alcoholism is a frequent complication of methadone treatment. In this study, the reinforcing properties of methadone were employed therapeutically to maintain patients on disulfiram. In the experimental condition, alcoholic methadone patients were given methadone only if they also ingested disulfiram. In the control situation, patients with the same addictions were given disulfiram but were not required to ingest it as a condition of receiving methadone. The results indicated that alcoholism was effectively arrested only while patients were treated under the experimental condition.

WHEN ADDICTS GIVE UP HEROIN in exchange for methadone maintenance, a substantial proportion become alcoholic. The methadone literature indicates that as many as 20 percent of unselected patients going on methadone may become problem drinkers (1, 2), and that, among programs which attempt to screen out applicants who appear to be alcoholic risks, around 10 percent of those admitted to maintenance are subsequently identified as severe alcohol abusers (3). These observations do not seem to reflect merely a concurrent but heretofore undetected problem with alcohol. Rather, methadone treatment itself, perhaps by virtue of its psychopharmacologically, socially, and legally stabilizing effects, appears to precipitate alcoholism in many individuals. Recently compiled statistics indicate that drinking is among the few "markedly increased complaints"—an increase of over 100 percent—occurring as a sequel to the initiation of methadone treatment (4). And among a large variety of possible correlates of maintenance failure examined in a detailed study of 679 patients of Drs. Dole and Nyswander one of the few factors found to be negatively associated with remaining in treatment was "having a problem with alcohol" during treatment. A history of alcoholism prior to methadone treatment did *not* correlate with treatment failure. Problem drinking during treatment, often associated with the abuse of other drugs, was the most reliable predictor of therapeutic failure (5).

Etzioni and Remp recently cited methadone maintenance and disulfiram (Antabuse) treatment as examples of "technological 'shortcuts' to social change" (6)—i.e., impersonal applications of technology to human problems in ways that are inexpensive and require only minimal use of trained manpower. If alcoholism were a necessary link in the causal chain that leads to methadone maintenance failure for some patients, then disulfiram treatment should provide an economical means to enable such patients to stay on maintenance. Because of the highly aversive physiological reaction that occurs almost immediately after the patient takes a drink, disulfiram appears to prevent drinking as long as the patient takes it regularly. Unfortunately, the clinical efficacy of this drug has not been established. The problem is that many patients tend not to take their prescribed disulfiram (7, 8).

Methadone, unlike disulfiram, is a highly reinforcing drug. As Chambers and associates observed: "The retention power of the methadone maintenance modality is without equal in the addict rehabilitation field. It is almost as if this type of patient will continue in treatment regardless of what we do or do not do for them" (5). Stabilized on methadone, the addict has acquired tolerance to the euphorigenic effects of the drug, but he must

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This research was supported in part by Public Health Service grants MH-14251 and MH-21514 from the National Institute of Mental Health to Baltimore City Hospitals.

TABLE 1
Days of Drinking Under Treatment and Control Conditions of Six Patients

Patient	Assignment	Number of days	Days Drinking	
			Number	Percent
A.	Treatment	136	0	—
W.	Control	73	0	—
P.	1st: Treatment	103	3	3
	2nd: Control	44	15	34
B.	1st: Treatment	35	0	—
	2nd: Control	74	14	19
H.	1st: Control	7	3	43
	2nd: Treatment	115	8	7
R.	1st: Control	48	18	38
	2nd: Treatment	6	0	—

take his daily dose to avoid withdrawal sickness (9). Thus methadone operates as a potent negative reinforcer.

Since disulfiram, if taken regularly, can arrest alcoholism, and since these patients are taking a highly reinforcing drug (methadone) every day, one would expect that their alcoholism could be controlled if daily administration of methadone were made contingent on their taking disulfiram. The successful treatment of one alcoholic-narcotic addict by this method over a three-year period has been reported (10). The research described here was undertaken to test the efficacy of this treatment method by comparing it with a control situation in which disulfiram was dispensed but its use was not reinforced.

METHOD

The subjects were addicts who were enrolled in collaborating methadone programs. They had well-documented severe alcoholism and had been screened for medical contraindications to disulfiram treatment.

Two groups of alcoholic methadone maintenance patients were compared as to treatment success. Each group received disulfiram during a mandatory 14-day loading period. Thereafter the experimental group (treatment group) was given their methadone daily contingent on their taking disulfiram, whereas the control group was provided with disulfiram and urged to take it, but it was not necessary for them to take disulfiram in order to obtain methadone.

If patients refused to take disulfiram, and if their drinking problems were considered by the methadone staff to be so severe as to portend their imminent loss to the maintenance program, they could be asked to choose between starting disulfiram and gradual narcotic detoxification, the disulfiram option remaining open during this period. In those cases where hospitalization was required for alcohol withdrawal or where institutionalization appeared desirable while a protective level of disulfiram was achieved, hospital admission was offered. All patients, whether in the hospital or not, were treated the same during the first two weeks. They were seen daily and were required to swallow a well-mixed suspension of 0.5 gm. of disulfiram in water before receiving their methadone.

On day 15 the disulfiram dose was reduced to maintenance level (around 250 mg.) and the patients were randomly assigned to two groups. Those in the treatment group continued to take their drugs as described above. The control patients also visited their methadone clinics daily but were given their supplies of disulfiram weekly and urged to take their daily dose each morning at home, as is the usual practice in dispensing this drug. In the event of treatment failure among the control group, transfer to the treatment group was possible. If a patient was doing well, the treatment staff could transfer him to the control group at their discretion.

Chemical and behavioral data were collected initially and sequentially, via program records, urine tests three times a week, Breathalyzer checks, interviews with patients, and (where ethical) contacts with collateral sources. When the person was accepted for the research program, information was collected about his prior drug and alcohol abuse and possible interrelations between abuse of various substances. For example, patients were asked whether their drinking was heaviest while they were on heroin, methadone, or on neither drug. An initial profile of vocational, familial, and legal adjustment was obtained, and follow-up records in regard to these parameters were kept. Records of attendance, evidence of drinking, disulfiram reactions, and illegal use of such drugs as heroin, amphetamines, cocaine, barbiturates, and meprobamate were also maintained; where indicated, special tests were ordered for other substances liable to abuse.

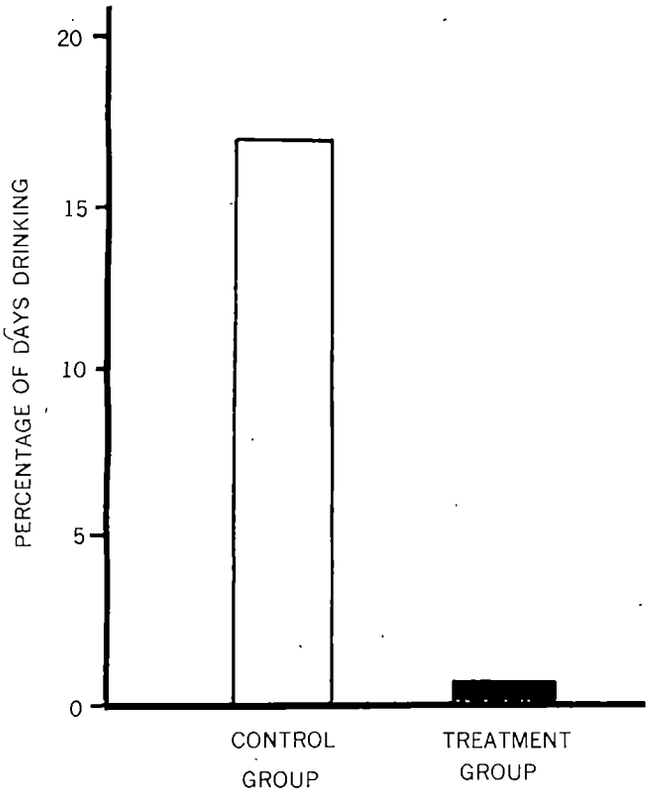
RESULTS

Six patients have participated in the project for periods ranging from 54 to 147 days (mean 107) after the initial 14-day disulfiram course. Table 1 shows the number of days these patients drank alcohol under treatment and control conditions.

Patients A. (treatment) and W. (control) did no drinking and were not reassigned. Patients P. and B., who were initially assigned to treatment, did little or no drinking under that condition. After the methadone maintenance staff reassigned them to the control condition, they began to drink substantially. Conversely, patients H. and R. were initially assigned to control and drank heavily, with the result that they were transferred to the treatment condition. Their drinking decreased markedly after reassignment.

The difference in the amounts drunk during the treatment and control conditions was greater than this tabulation of drinking days reveals. It was apparent from the patients' accounts of their intake, observed signs of intoxication, and the severity of disulfiram reactions that a

FIGURE 1
Percentage of Days of Drinking by All Six Patients After Random Assignment to Control or Treatment Groups



day's drinking for the control patients was in the range of one to two pints of distilled spirits; whereas in the treatment condition the amounts consumed were invariably small: usually one shot or one beer to test the disulfiram effect. Figure 1 contrasts the drinking of all six patients in terms of percentages of days drinking under the treatment versus the control condition.

To minimize nonrandom factors, which figured in each patient's reassignment, only the initial (random) assignment for each patient is considered. The number of drinking days for the three patients initially assigned to control totaled 22 out of 128 days, or 17 percent drinking days. The number of drinking days for the three patients initially assigned to treatment totaled three out of 274 days, or one percent drinking days. These results are significant at the .001 level, according to a test for difference between proportions.

Although most patients were reluctant to take disulfiram, they all preferred this treatment to discharge from methadone maintenance. In the case of two patients it was necessary to begin narcotic detoxification before they would accept disulfiram. Each day's drinking recorded under the treatment condition resulted in a disulfiram reaction, which was invariably mild—clearly because the amounts drunk had been minimal, as noted above. No such reactions to alcohol were noted under the control condition; this was because (as the patients reported) they had always discontinued disulfiram several days before starting to drink.

All six patients reported that their alcoholism had been most severe while they were on methadone maintenance (as opposed to periods when they were using heroin or were drug-free). Five of the six required brief hospitalization on intake for treatment of alcohol withdrawal. Urine tests positive for drugs except methadone were rare. A trend toward increased employment appeared; this was apparently related to a diminished incidence of intoxication among the patients since starting on the research program.

COMMENT

These results indicate that at least over a short-term period, drinking by alcoholic-narcotic addicts can be arrested by disulfiram when their maintenance on methadone is made contingent on their taking disulfiram. If this treatment method proves to be safe and effective with larger population groups and over longer periods of time, an economical and administratively simple treatment will be available for large numbers of methadone patients with drinking problems. Of course disulfiram will not affect the causes of these patients' drinking any more than methadone treatment gets at the roots of heroin addiction. But as with methadone treatment of heroin addiction, the reinforcement of disulfiram taking may enable these patients to maintain a sufficient degree of stability to adjust to society and perhaps in time to effect some fundamental changes in their life situations.

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Marijuana and Other Drug Use by Women College Students: Associated Risk Taking and Coping Activities

BY BEATRICE A. ROUSE, M.ED., AND JOHN A. EWING, M.D.

Study of a random sample of 184 undergraduate women revealed that marijuana users differed significantly from nonusers in various aspects of physical and emotional health, the use of a variety of other drugs, means of coping with anxiety and depression, and risk taking to achieve certain desired mental states. The findings have implications for patient care as well as for drug education and student health programs.

PREVIOUS STUDIES have indicated a high prevalence of the use of medications without professional supervision among college students (1) and among delinquents in particular (2). Our interest included exploring this attribute, which might be considered a drug-taking propensity, as well as studying the psychosocial and health aspects of marijuana and other drug use in a random sample of undergraduate women. Comparisons of marijuana users and nonusers were made in terms of their drug use and their willingness to take psychological, physical, and legal risks to achieve certain desired mental states with drugs. In addition, since collegiate users of illicit drugs were found to be significantly more tense, moody, and depressed (3) than their peers, this study attempted to determine whether the means used to cope with anxiety and depression differed between the marijuana users and nonusers.

SAMPLE AND METHOD

A random sample was drawn from the total enrollment of women students at a large coeducational state university in the southeast. The response rate was 92 percent. A confidential interview was conducted by trained women research assistants who administered a comprehensive questionnaire, a list of coping activities including those used in a previous study (4), and the Eysenck Personality Inventory (5). The research materials were completed by 184 randomly selected women students; their ages ranged from 17 to 27 years, with a mean of 20.5 years. The questionnaire and research methods have been described more fully in a previous paper (6).

In this study the term "users" refers to all those who reported that they had taken the particular drug under study at least once in the past year. Comparisons of marijuana groups, however, are between those who reported having ever used the drug and those who had never taken it. Marijuana users are then further differentiated by their present drug status, i.e., whether at the time of the interview they had discontinued its use or were continuing to take it.

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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RESULTS

Primary Sources of Drug Information

Marijuana users and nonusers differed significantly in their primary sources of information concerning drugs in general. Marijuana users relied upon close friends and reading almost exclusively for their information, while nonusers relied on formal lectures and mass media such as television, radio, and films ($p < .05$).

Drug Use in General

The women students in this study used a variety of prescription and nonprescription drugs. In the past year, 93 percent had used alcohol, 26 percent had used marijuana, 17 percent had used tranquilizers, 12 percent, amphetamines or pep pills, ten percent, sleeping pills, three percent, mescaline, and two percent, LSD.

The consumption of a variety of commonly used substances such as aspirin, tobacco, and vitamins was also assessed. Analysis of variance was used, and significant differences were found between marijuana users and nonusers both in the total number of substances used and in the amount currently used compared with that in previous years ($p < .001$).

Table 1 shows the various substances studied. The marijuana users were more likely to use alcohol, tobacco, birth control pills, tranquilizers, and pep pills. These differences were all statistically significant when tested by chi-square analyses. In addition, more marijuana users had significantly increased their use of tranquilizers ($p < .02$), pep pills ($p < .05$), and birth control pills ($p < .001$) in the last year.

Alcohol Use

The use of alcoholic beverages was examined in a num-

TABLE 1
Reported Use of Various Substances in the Past Year, in Percentages

Substance	Marijuana Users (N=58)	Never Used Marijuana (N=126)	Significance
Alcohol	100	89	p<.05
Aspirin	95	98	n.s.
Vitamins	67	67	n.s.
Tobacco	64	40	p<.01
Birth control pills	47	22	p<.001
Tranquilizers	26	13	p<.05
"Pep" pills	24	6	p<.001
Laxatives	22	26	n.s.
Sleeping pills	17	11	n.s.
Diet pills	17	11	n.s.

ber of ways in order to determine whether marijuana users had indeed made marijuana, rather than alcohol, their drug of choice.

As shown in table 2, the total alcohol intake for the last year was greater for marijuana users than for nonusers (χ^2 = 13.82, d.f. = 2, p < .001). Total intake was calculated from a detailed examination of the kinds of alcoholic beverages consumed, the usual amount and frequency of each beverage type, and the volume equivalents of absolute alcohol. For example, a student who drank one or two beers a week would consume less than 4,000 ml. for the year; about four oz. of distilled spirits on most days would result in less than 16,000 ml.; and the equivalent of over a fifth of whisky per week would result in more than 16,000 ml. for the year.

Marijuana users also reported drinking regularly and more frequently than nonusers. Sixty-nine percent of the users and only 50 percent of the nonusers drank at least once a week (p < .02). The more regularly the students drank, the more reasons they gave for drinking. It is interesting to note the tendency for more marijuana users (16 percent) than nonusers (seven percent) to drink to alleviate menstrual distress.

The marijuana users' own appraisal of their drinking appeared to be reasonable; this appraisal differed significantly between the groups (p < .001). More marijuana nonusers considered themselves abstainers, while more users considered themselves frequent, moderate drinkers. None of the students characterized themselves as heavy or excessive drinkers.

Marijuana users had begun drinking alcoholic beverages (discounting occasional sips during childhood) at a significantly earlier age than nonusers (p < .001). The mean age of first drinking for marijuana users was 17.0 years and for nonusers, 18.0 years. Also, those who continued to use marijuana had begun drinking at an earlier age than those who had discontinued its use (p < .05).

Marijuana Use

At the time of the survey, 17 percent of the sample were currently using marijuana, 15 percent had used it but were no longer doing so, and 68 percent reported that they had never used marijuana. The mean age of first marijuana use was 19.9 years.

Twenty-nine percent of the users had tried marijuana only once, and only 18 percent had taken it more than ten times. Many of the users had smoked less than one marijuana cigarette, that is, they shared one or two with other members of a group. The usual amount smoked is shown in table 3; 48 percent generally smoked no more than one marijuana cigarette on any given occasion.

Table 4 shows the maximum amount ever smoked at any one time. Continuing users smoked a significantly greater amount; 53 percent of them had smoked a maximum of five or more marijuana cigarettes at one time.

Reasons for Use or Nonuse of Marijuana

The primary reasons given for the first use of marijuana were curiosity (93 percent), urging of friends (17 percent), and "wanting the good feelings people said marijuana gave" (14 percent). More of the continuing users first took marijuana for the good feelings it reputedly produced (p < .05). Those who discontinued its use did so because of a low level of gratification (52 percent), legal consequences (48 percent), unavailability (19 percent), and health (15 percent).

Most of the women students had never used marijuana, even though 48 percent of them reported that they had had opportunities to do so. Several reasons for nonuse were cited: undesirable psychological or physical effects (28 percent), lack of desire for or interest in marijuana (24 percent), lack of need or purpose for using marijuana (18 percent), and legal prohibitions (17 percent).

Backgrounds of Users and Nonusers

Socioeconomic status, present religious status, and academic major differed significantly between users and nonusers. Marijuana users were predominantly from the upper socioeconomic strata as measured by the Hollingshead two-factor index (7); 92 percent of the students from blue-collar and nonprofessional backgrounds had never used marijuana (p < .01). The majority of the students remained in the religion in which they were raised; marijuana users, however, were more likely to indicate that they were no longer associated with any organized religion (p < .001). Significantly more marijuana users than nonusers were majoring in the humanities, and fewer were in nursing and health education (p < .001).

TABLE 2
Comparative Consumption of Alcohol in the Past Year, in Percentages

Alcohol Consumption	Marijuana Users (N=58)	Never Used Marijuana (N=126)
0–4,000 ml.	19	81
4,000–16,000 ml.	39	61
More than 16,000 ml.	59	41

TABLE 3
Usual Consumption of Marijuana on a Given Occasion

Usual Number of Marijuana Cigarettes	Number of Users: Discontinued (N=27)	Number of Users: Continuing (N=31)	Percentage of Total Users (N=58)
One or less	18	10	48
Two	6	9	26
Three or more	3	12	26

There were no significant differences between the groups on age or on extraversion and neuroticism as measured by the Eysenck Personality Inventory.

Activities Found Helpful When Depressed or Nervous

The students were asked to indicate whether each of 14 listed coping activities had been helpful to them when they were depressed or nervous. Table 5 indicates those activities which were found helpful to a significantly different degree by the two groups. Users were more likely to find drinking, smoking, sexual activities, and medicines other than tranquilizers helpful. Nonusers, on the other hand, felt helped by religious activities. The activities used most often by the users when depressed or nervous were smoking and solitary activities ($p < .05$), while nonusers more often resorted to physical activities as a means of coping.

Desired Mental States and Associated Risk Taking

The students were presented with alternative pairings of four mental states and asked to choose in each case the one they desired. The one chosen without exception was considered the preferred mental state. Eleven percent of the students, primarily nonusers, had no definite preference. Significantly more users preferred inner awareness and hallucinations, while the nonusers preferred exhilaration and rapid thought ($p < .001$).

When asked to indicate which mental state from a list of 14 they would like to achieve more often than they did now, significantly more marijuana users wanted more freedom from depression and more unusual thoughts or associations ($p < .05$).

The students were then asked to consider the desirability of each of the 14 mental effects if it were to be achieved by using: 1) a drug that had no physical, psychological, or legal risks, 2) marijuana, 3) LSD, and 4) amphetamines. The subjects were asked to take into account the risks associated with each of the three drugs specifically named.

Table 6 shows the desired effects that the students were willing to achieve with a drug if it had no associated physical, psychological, or legal hazards. While significantly more marijuana users were willing to use a drug to achieve most of the effects, substantial numbers of nonusers were interested in a safe drug for only certain very select desired effects; 76 percent of the nonusers were willing to take a risk-free drug to achieve thinking more rapidly and logically, and 67 percent to achieve increased sensory awareness, i.e., of sights, sounds, and music.

Table 7 shows the desired mental states and associated hazards that marijuana users and nonusers were willing to risk with marijuana and the amphetamines. Marijuana users were more willing to take psychological or health

TABLE 4
Greatest Level of Consumption of Marijuana at Any One Time

Maximum Number of Marijuana Cigarettes	Number of Users: Discontinued (N=27)	Number of Users: Continuing (N=31)	Percentage of Total Users (N=58)
One	16	6	38
Two	7	4	19
Three-four	3	5	14
Five or more	1	16	29

TABLE 5
Activities Found Helpful When Depressed or Nervous, in Percentages

Activity	Marijuana Users (N=58)	Never Used Marijuana (N=126)	Significance
Drinking	64	29	$p<.001$
Smoking	60	31	$p<.001$
Sex	29	13	$p<.02$
Religion	24	58	$p<.001$
Taking nontranquilizing medicines	12	4	$p<.05$

TABLE 6
Percentage Willing To Achieve Specified Mental States by Using a "Safe" Drug

Desired Effect	Marijuana Users (N=58)	Never Used Marijuana (N=126)	Percentage of Total Sample (N=184)	Significance
Rapid, logical thought	88	76	80	$p<.10$
Sensory awareness	95	67	76	$p<.001$
Freedom from depression	79	63	68	$p<.05$
Freedom from worries	79	62	67	$p<.02$
Inner awareness	86	56	65	$p<.001$
Exhilaration	83	52	61	$p<.001$
Unusual thoughts	86	47	59	$p<.001$
Less concern about future	71	53	59	$p<.05$
Hallucinations	69	28	41	$p<.001$
Less sexual inhibition	59	33	41	$p<.001$
Mystical, religious experience	50	24	32	$p<.001$

TABLE 7
Willingness To Take Risks with Marijuana and Amphetamines To Achieve Specified Mental States, in Percentages

Desired Effect	Marijuana		Amphetamines
	Would Take Health Risks	Would Take Legal Risks	Would Take Health Risks
Have used marijuana (N = 58)			
Sensory awareness	76	50	21
Unusual thoughts	71	47	17
Exhilaration	67	41	19
Inner awareness	66	40	14
Freedom from worries	59	38	10
Rapid, logical thought	57	34	28
Freedom from depression	57	38	12
Hallucinations	50	36	10
Never used marijuana (N = 126)			
Rapid, logical thought	12	6	10
Freedom from worries	11	6	7
Sensory awareness	11	3	4
Freedom from depression	10	3	5
Inner awareness	10	3	3
Exhilaration	9	2	3
Social facility	9	2	2
Unusual thoughts	7	2	2

risks than legal risks, while nonusers rarely wanted to risk any of the associated hazards for any of the desired effects.

Few of either the marijuana users or nonusers considered the risks of LSD worthwhile, and, indeed, we found only five students who had ever used it.

Physical and Emotional Health

Significant differences between marijuana users and nonusers were also found in terms of various aspects of physical and emotional health. Significantly more marijuana users reported sleeplessness ($p < .05$), violent or frightening dreams ($p < .01$), having ever been involved in automobile accidents ($p < .001$), having been involved in automobile accidents in the last year ($p < .05$), and consultation with a psychiatrist ($p < .01$). Also, there was a tendency for more marijuana users to have had injuries requiring hospitalization and to have consulted a physician for "nerves."

DISCUSSION

In our various investigations of drug use among enrolled students, we have found that the use of marijuana in the college population studied appears to be of low dosage, infrequent, and associated with upper socioeconomic backgrounds and an abandonment of organized religions in both undergraduates and graduates, regardless of sex (6, 8). The psychosocial associations found in this region (southeast) appear to be similar to those found in other areas of the country (9–12).

Even though a broad definition of "marijuana user" was utilized in this study, significant differences between the groups were found. Marijuana users differed in their primary sources of drug information as well as in their actual use of a variety of substances. Women who smoked marijuana reported significantly more use of substances such as alcohol, tobacco, tranquilizers, and birth control pills. Those who had begun drinking at an earlier age were more likely to smoke marijuana. The finding of significantly more continued and regular drinking among marijuana users was supported by a further study of undergraduates (13) but not of graduates (8).

Both marijuana users and nonusers seemed receptive to the concept of altering moods or mental states with a drug. The nonusers, however, were more selective as to the risks they were willing to assume and the particular mental state desired. Nonusers were interested in a safe, legal drug that would improve their rational processes or increase their sensory awareness. They wanted increased social facility and freedom from depression. Marijuana users, on the other hand, appeared to be seeking all kinds of new stimulating experiences, particularly those resulting in a change of consciousness and sensory and inner awareness.

Whether the users are willing to assume more risks or perceive fewer hazards (14) needs further study. The greater number of automobile accidents and of injuries requiring hospitalization among users suggests their actual involvement in more situations with physical risks. Since marijuana users were usually also regular drinkers, the determination of the effects of marijuana should be done cautiously. The frequency of automobile accidents reported among marijuana users, for example, may be due to the effect of alcohol alone, marijuana alone, or the two in combination.

The differences between the groups in activities found helpful when depressed or anxious also indicate a greater willingness on the part of the marijuana users to take substances in order to deal with their feelings. These results are comparable with the findings from our study of women graduate students (8).

Because the women marijuana users were also more likely to consult either a psychiatrist or a physician, these findings have implications for patient care as well as for programs of drug education and student health.

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DISCUSSION

GEORGE S. GLASS, M.D. (Bethesda, Md.)—That marijuana use has become a ubiquitous phenomenon in present-day American culture is reflected by the high percentage of users under age 30 in high school, college, and graduate school. This study documents marijuana use in still another population—26 percent of the women students at a southeastern university. Other studies have found that up to 60 or 70 percent of college populations have used marijuana (1). The variability in reported rates is due to many factors, including the definition of drug use, the sex of the user, the location of the study, and the individual personality differences, including psychopathology, of the users (2, 3).

This study defines a marijuana user as anyone who has ever smoked it—even a single puff. In fact, the authors found that 42 percent of the students they classified as "users" had not smoked even ten marijuana cigarettes in their lives. Only 11 percent of the total sample had smoked over ten marijuana cigarettes. In a relatively large sample such as this, it would have been more useful to subdivide the user category into experimenters and frequent users, with perhaps ten cigarettes as the dividing line. The data would then be more meaningful in documenting whether there is an increase in the psychopathology of users: whether there is an increased need for coping activities and whether smoking marijuana has itself become a coping activity. It is to be hoped that later work will further elucidate these points.

Considering the broad definition of drug use, the low percentage of users reported in this study is important and probably related to several factors. One is the sex of the users, as there is generally a higher usage rate among men. A comparison group of men from the same school would have provided an interesting contrast. A second factor is the location of the study, since usage rates are relatively higher in the northeast. A third factor is the type of college from which the sample is drawn, as higher rates of marijuana use are found in colleges that emphasize academic independence and personal freedom (2). This is reflected in this study by the higher percentage of users who were liberal arts majors rather than science or nursing students.

This paper also elaborates on various demographic and psychological parameters of drug users. It might have been helpful to cast the authors' findings in different terms, such as the user's relationship to authority and to her family, or her degree of self-control.

The authors have demonstrated that drug users were from higher socioeconomic groups and used alcohol at an earlier age. They state that drug users were less involved in their original religions, but do not explain how this important and provocative point was documented.

These characteristics of marijuana users reflect parental background and upbringing. An individual's relation to authority is largely a result of his family's structure and his perception of parental values. Thus, some hypotheses could have been explored to explain the differences of behavior reflected in the data. For example, if users began drinking at an earlier age, was this an individual act of rebellion against strict or even duplicitous parental authority? Or was the drinking done with parental support, in a home atmosphere in which societal limits were examined and questioned? Unfortunately, the authors do not formulate any conclusions on this important point; the addition of a scale to assess response to authoritarianism might have been useful.

The authors view marijuana use as a mode of coping or of trying to alter anxiety, moodiness, and depression. Their presentation is rather prejudicial, since their findings could also be attributed to the heavy alcohol consumption of part of this population. Pharmacologically, though, marijuana does have some tranquilizing effects (4).

Starton's work on drug use in Viet Nam provides evidence that marijuana may be used at times of stress for tranquilization, or as a coping activity. He found a higher incidence of marijuana use among military personnel leaving Viet Nam than among those who had just arrived (5). He related this increased use to stress and combat rather than simply to drug availability or social approval. It is of interest that while marijuana use began under the stress of the military situation, many of the individuals planned to continue to use it when they returned to civilian life. In effect, what had begun as a coping activity became a pattern that would be continued without stressful stimulus. What is uncertain is whether drug use then remains a coping activity for these persons, or whether it has become an acceptable recreational activity.

These studies may indicate that if the legal consequences of smoking marijuana are reduced and if the health risks are further clarified and found to be small, the actual risks of smoking it become slight. The percentage of experimenters may well increase, as was suggested by this study, but the percentage of heavy users may remain close to the same level that the authors found—ten percent of the population. Whether these heavy users are also those individuals who would be heavy drinkers, with a need to cope through the use of one drug or another, still remains to be clarified.

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Postgraduate Training in Child Psychiatry: The Content of the Curriculum

BY B.G. BOOTHROYD BROOKS, M.B., D.P.M.

In order to help others in the field arrive at a more precise knowledge of what constitutes a satisfactory curriculum of postgraduate training in child psychiatry, the author presents the content of a recently designed two-year program. It has been planned to achieve the maximum possible coordination of courses and to provide broad clinical experience.

AT THE ANNUAL MEETING of the Society of Professors of Child Psychiatry in March 1972, there was much confusion as to what should be the content of undergraduate and postgraduate teaching programs in child psychiatry. A computer search of the world literature had revealed the extreme paucity of articles dealing with this fundamental topic.

It is a familiar experience of those accustomed to attending meetings on the design of university teaching programs that discussion tends to stick at the old familiar issues: the general philosophy and methodology of teaching, the transmission of attitudes currently in vogue or otherwise regarded as desirable, the need for a holistic, or other, approach, and, of course, conflicts among factions of differing theoretical viewpoints. These heated discussions apparently do not lead to progress in the creation of a curriculum of postgraduate training that is scientific and systematic.

Although it is often neglected, the fundamental question of actual curriculum content persists. What should be taught? What areas of knowledge should be covered? What facts should be demonstrated? What evidence should be critically evaluated and discussed? There is fear of losing significance in the complexity of detail, but the detail itself is not without significance. Complexity may be feared, but its recognition may be the beginning of wisdom.

This report describes a recently designed postgraduate teaching program in child psychiatry. Its objective is not, of course, a diminution of the arguments surrounding this subject, but rather, the achievement of a more precise knowledge of exactly what we are arguing about. I appreciate the fact that no syllabus can give an adequate picture of the vitality and fascination of a course of study or of the laxity or rigor with which it is carried out. It might, however, be regarded as unwise to attempt to remove, in one short article, all the mystery surrounding the question "Just what is child psychiatry?"

The suggested academic program extends over two years and comprises seven courses.[1] Successful graduates of the program, which was started in September 1972, are to be awarded the degree of M.Sc. in the Faculty of Medicine of Memorial University of Newfoundland.

THE CURRICULUM

Course 1: The Scientific Principles of the Measurement of Child Development

This course includes discussions of the concepts of intelligence, educational attainment, personality, social development, language development, physical growth, and motor and perceptual development. The scope and limitations of the measures of these developmental variables are discussed and demonstrated. The course consists of 15 two-hour sessions in the first year.

Course 2: The Methodology of Scientific Research Applied to Child Mental Health

This course considers the principles of research meth-

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[1] A detailed and up-to-date bibliography related to each session of each course is available from the author.

odology, including the formulation of testable hypotheses, survey methods, sampling techniques, questionnaire design, interview techniques, the construction of interview schedules, biostatistics, the use of computers, and preparation of scientific papers. It provides the students with sufficient background to undertake a research project of their choice; this project forms the subject of a dissertation presented at the end of the second year. It also enables them to critically evaluate the major scientific investigations in child psychiatry that are covered in the appropriate parts of the course. This course consists of 45 two-hour sessions in the first year. Three hours per week for 75 weeks are allowed for preparation of the dissertation.

Course 3: The Normal Development of the Individual Child

This course deals with the development of the child from infancy to adulthood and includes critical descriptions and evaluations of the modern theories of mental and personality development in infancy, childhood, puberty, and adolescence. The course consists of 45 two-hour sessions in the first year.

Course 4: Social Influences on Child Development

This course considers the socialization of the child and the influences of environmental variables. It includes the scientific study of the family, parent-child relationships and behavior, child-rearing practices, maternal employment and multiple mothering, social and sensory deprivation, the effects of parents' physical and mental illness upon the child, bereavement and the effects of the loss of a parent, the problems of family disruption, single-parent families and the broken home, adoption, and foster homes. The course consists of 30 two-hour sessions in the second year.

Course 5: Emotional Aspects of Physical Illness in Childhood

This course deals with the consequences of physical illness in children and its impact upon parents and siblings, chronic handicaps, the effects of admission to the hospital, and the child with a fatal illness. The course consists of 15 two-hour sessions in the first year.

Course 6: The Childhood Psychiatric Syndromes

This course considers a number of topics, including: the classification, epidemiology, detection, and categorization of psychiatric disorders in children; the clinical features and natural history of each syndrome, psychosomatic disorders, psychoneurotic disorders, psychoses, antisocial disorders and delinquency, sexual disorders, and depression and suicide in childhood and adolescence. The course also covers disorders of speech and language, educational and learning difficulties, and reading difficulties. The remaining topics covered are neurological disorders in childhood, the concepts of brain damage and cerebral dysfunction, the hyperkinetic syndrome, mental retardation, epilepsy in childhood, temper tantrums, thumb-sucking, nail-biting, tics, delusions, hallucinations, fire setting, refusal to attend school, enuresis, and encopresis. The course consists of 60 two-hour sessions in the first and second years.

Course 7: Treatment in Child Psychiatry and Child Psychiatric Services

This course includes a consideration of various modalities of intervention and their appropriate selection. Treatment modalities considered include individual and group therapies with children and adolescents, family therapy, behavioral and conditioning techniques, remedial education, and drug treatment in child psychiatry. Other modalities discussed are community services as treatment, child guidance clinics, child psychiatric outpatient clinics, day-care units, residential care in schools and hospitals, consultation to schools, social and welfare services, and the scientific evaluation of treatment and follow-up studies in child psychiatry. The course consists of 90 two-hour sessions in the first and second years.

DISCUSSION

This academic program takes up four half-days per week of the two-year course.[2]

The scheme of the program enables the courses to be coordinated with each other. For example, the child psychiatric syndromes related to infancy are considered at the time that the course in normal development is dealing with infancy. The program has, in fact, been planned in detail to achieve the maximum possible coordination of courses.[3]

Every fifth week there are sessions called Survey—Question—Revise—Evaluate (S—Q—R—E). Each of these sessions may be used for any or all of these purposes. This built-in provision allows great flexibility and ensures that no topic is neglected and that important topics are stressed by reemphasis.

Experience in the practical aspects of child mental health care is provided in the university's department of child psychiatry. This training, which takes up an additional four half-days per week throughout the two-year course, enables each student to have experience in ongoing care on an individual and on a group and family basis. A balanced clinical experience is provided that covers outpatient assessment and treatment of children and adolescents, all present modalities of treatment, inpatient experience, and experience in consultation with other disciplines. This, together with the academic program, which provides the scientific basis of sound assessment and treatment, gives the students experience in high-quality patient care in the community as well as in the hospital setting.

The remaining two half-days-per week are used for a

[2] A diagram showing the integration and sequence of the courses is available from the author.

[3] Two diagrams showing the coordination of courses and outlining the specific content of the two-year program in detail are available from the author.

series of organized visits and seminars. For example, visits to schools with children of all ages and all socioeconomic groups supplement the course on the normal development of the individual child. At appropriate points in the course, visits are organized to the various community services and agencies dealing with children who are socially, mentally, and physically handicapped. Seminars place due emphasis upon such problems as mental retardation, educational handicaps, juvenile delinquency, and nonmedical use of drugs by children and adolescents; and appropriate agencies and institutions are visited at appropriate times in the course.

A Case of Capgras Syndrome

BY M. T. HASLAM, M.D., D.P.M.

The Capgras syndrome in a 32-year-old woman is described. While showing some affective and schizophrenic features, the syndrome appears to have retained its purity over a period of eight years. A good remission has been maintained recently through the use of long-acting phenothiazines. Case material, including letters, is presented and a brief summary given of the historical origins of the syndrome.

IN THE CAPGRAS SYNDROME, first described by Capgras and Reboul-Lachaux in 1923 (1), the subject holds to an unshakable belief that a double has replaced some person he knows well. The syndrome had in effect been described earlier in Plautus' play *Amphitryon*, in which the god Mercury assumes the appearance of Sosi, Amphitryon's servant, and becomes his double—hence the French name for the syndrome, "L'illusion des Sosies." Another example is found in Dostoevsky's *The Possessed*, written in 1871.

Even if other psychotic features are present, the delusion of a double is the dominant feature in the syndrome. The Capgras syndrome is rare but appears highly specific, with a typical clinical pattern and psychopathology. The "illusion of Frégoli" is a similar condition in which a patient identifies a persecutor in several apparently quite dissimilar persons (1, p. 2). But in the illusion of Frégoli there is an affirmation of *imaginary resemblances*, while in the illusion of Capgras there is a perception of *nonexistent differences*, resulting in a negation of identities. A further subdivision, "illusion of intermetamorphosis" was described by Courbon and Tusques in 1932 (1, p. 2); here the patient believes that persons in his environment interchange with one another.

Capgras' original case involved a woman who appeared to be in a chronic paranoid state; she complained that "doubles" had replaced various persons in her environment. This case and others were reviewed by Coleman in 1933 (2). Todd and Dewhurst (3) described seven cases in 1955. Coleman's case, although not typical, appears to be the first case report published in England. The syndrome is reviewed in Enoch, Trethowan, and Barker's book *Some Uncommon Psychiatric Syndromes* (1). In general these conditions are considered in France to be disease entities in their own right, while in England the cases have tended to be seen as associated with other psychiatric illness.

CASE REPORT

The patient first appeared in 1961 at the age of 32, showing disturbed behavior and believing that people were persecuting her because she did not smoke.

There was little of relevance in the family history. Her parents were dead; there was one sister with whom the patient kept in touch. The patient was born in London and had an uneventful schooling and early life. She worked as a clerk in the Civil Service until her first illness. Since then she has had eight admissions. A delusional system formed, relating originally to people following her who had some special connections: these people appeared in different persons in the street, as is described in her first letter, which follows. Later in the illness a change in her fiancé became the dominant feature, followed in a further relapse by similar thoughts relating to her sister. In 1968, treatment with long-acting phenothiazines was commenced, and the patient remained well until August 1970, when a relapse due to accidental discontinuance of the drug occurred. She was paranoid and believed her fiancé had been replaced by a man who was homosexual. This related to her own frustration concerned with failures of sexual function during the prolonged engagement. Treatment was recommenced and she again improved, although she remained rather belligerent, and in November 1970 she still thought that her fiancé, because he behaved differently, had to be an imposter. By March 1971, however, she appeared well and remained at work, continuing on intramuscular doses of fluphenazine decoanate, although a letter dated October 22, 1971, suggests that she still held to her underlying delusional belief.

Dr. Haslam is Consultant Psychiatrist, Clifton Hospital, York YO3 6RD, England.

Quotations from Her Letters

November 27, 1968

I am hampered by being dogged by a boy of about 15—who seems unable to exist without my notice of him—He breaks up every household I enter. If I cross the road to get away from him another one appears on the other side. I have come to the conclusion he must represent the Infant Spanish Pretender, a son of Greece and Spain. I believe this person also upholds Peter Townsend.

July 17, 1970 [to the Home Secretary, enclosing details of some of her sister's belongings]

There was a time before putting me in hospital some years ago when she removed the bolt from the toilet door, and generally behaved in a way quite unlike herself. *This* house has an open toilet. My fiancé who lived in this house moved here in 1949. He is listed by himself in the Directory in 1957 yet he claims his wife was here. From the discrepancies which have arisen since I have been here it makes one wonder whether his wife when here actually knew when he *was* here and when he was *not* here. She had car number 3213V. Then it suddenly changed to 3218V. She [sister] may have changed very much. But I am sure there has been foul play somewhere and they are covering it up with references to the nobility. Yet the Royal Family have become quite informal. I am tired of trying to solve these riddles. They stand in the way of my marriage. If it is not explained I shall be forced to the conclusion that the nobility have murdered my sister, and the church may have had a hand in it!

October 12, 1970

I have just been to see Roger in hospital and he seems much worse. But there is a very awkward issue. You see the night when he ducked out and went to the river, somebody who knows my fiancé told me that he had been seen in a definite vicinity [in this district] between 10:30 and 11 p.m. In fact I have tried to find contact with the real Roger for a long time but nobody would help me. This is the first time I've been given a definite clue. I thought these others must be acting for him. He *must* know. What on earth can he be doing? When I knew him he couldn't afford to live anywhere but his own home. It put me in an awkward position and I must say it seems to me that the present sufferings of the Roger in hospital are surely caused by the silence of the real Roger.

October 13, 1970: She stated to the mental welfare officer that he had taken "the wrong Roger" to the hospital and that the real one was still at large.

October 13, 1970

As long as this isn't known the hospital is treating the wrong person—I mean he may be quite different from the one in their records. . . . Somebody will have to find the real Roger, because in his mind in more lucid moments the one in hospital is talking of selling up. You see I don't know where he came from in the first place, or what he was before, but it must be enough to split anyone's mind. The one who went to Morecambe with me said he was a policeman.

October 22, 1971

I wrote to Securicor. They informed me the photographs I have of my fiancé are of three different men. However, they sent someone to the house to question this person and he said he had lived there for 20 years so he must be all right. Everyone, the Government, his brother and friends accept him, so as far as I can see there is nothing more to be done.

DISCUSSION

The Capgras syndrome is said to occur at any stage of an accompanying psychosis but when it occurs it tends to dominate the clinical picture. It is interesting how often the words "double" and "imposter" are used to describe the misidentified person. An important feature is the specificity of the double. It is a key figure in the life of the patient at the time; usually it is the spouse. The individual appears to see changes in the partner or to externalize changes in himself that are misinterpreted to create a new "bad" individual who seems to have totally replaced the other. Paranoia is therefore often present; the disorder is one of conaesthesia (ego feeling).

In the case report given here the delusion commenced with the patient's feeling that she was being followed by someone who represented, or was, Royalty. This shows many similarities with the illusion of Frégoli. The delusion then crystallized onto her fiancé, who seemed changed; this in fact began at a time when the fiancé had developed a schizophrenic illness. In later stages the patient's sister also was seen as involved in some kind of change or foul play.

During some phases of her illness the patient manifested a thought disorder of the schizophrenic type and also, in other phases, an affective change, but the dominant feature continuously was along the lines of Capgras' original description. The underlying disorder, however, appears to be one of perception, with concrete thinking. This perceptive disorder appears to explain the misinterpretations, which in the fiancé's case were based on a personality change due to illness, concerning which the patient failed to show insight.

Our patient's illness—and indeed most of those described under the Capgras syndrome—show such a perceptive disorder and are most probably basically schizophrenic in origin.

Treatment has been with phenothiazines; there has been a marked and lengthy remission on fluphenazine decoanate. The patient's relapse on one occasion appeared to be related to a temporary discontinuation of the drug.

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LETTERS TO THE EDITOR

Even Mental Health Jargon Can Be Funny

SIR: Many different types of group therapy or group interaction have been used in recent years with employees not only in industry, but also in the mental health community. In order to keep our thinking in the proper perspective, it might behoove us to pay some attention to what those among us who are nonclinical personnel think about some of these endeavors.

After being involved in such group encounters and self-introspection activities, some of the staff members at my mental health center adopted the appropriate life-style and conversational mode, which to some of our nonclinicians seemed laughable at best. In response to their daily use of mental health jargon some of our more rational and well-put-together staff members submitted the following humorous interpretations to me. I think these would be amusing enough, and maybe even carry sufficient learning value, to be included in the *Journal* for those who somehow forget that we live in a very real world in spite of our need to compartmentalize certain events for study.

The interpretations follow:

Useful Phrases for Hiding Confusion and Ignorance

When you are put on a spot to give an explanation or opinion, or comment on a relatively controversial matter, the following phrases inserted at the beginning of every fourth sentence usually will give the impression of calm, organized thinking and honesty (while thoroughly confusing the other parties in the conversation). These phrases also offer increased disorientation among listeners when used in conjunction with long, obscure words, such as, "mental health conceptualizations," "functionalistic," "therapeutic," etc. Remember, however, that it is helpful to spice your sentences with contemporary jargon such as "rap," "plug into," or "groovy" so as to keep you on the same level as your audience.

Examples: "I get the feeling that . . ." (insert appropriate accusation and criticism of the person whose arguments are too good).

"What I hear you saying is . . ." (insert twisted version of the statement of other speakers; exaggerations are good here).

"I guess what I am trying to say is . . ." (repeat verbatim whatever previous sentence in your conversation sounds the most intellectual).

"I think what he is trying to say is . . ." (insert your opinion on the matter at hand).

"One thing that turns me off is . . ." (give a typical paranoid statement that people are afraid of change, too establishment, lack of change, how bad the food tastes, etc.).

"I think we should get this out in the open . . ." (insert appropriate rumor and ask to be excused to go to the john).

All of this may sound somewhat ridiculous, but I truly believe that it expresses the feelings often held by those with whom we fail to communicate on a realistic, everyday level.

FRED D. BARTON, M.D.
Cuyahoga Falls, Ohio

Female Patients: Intractable or Victims of Chauvinism?

SIR: Dr. John H. Houck's article "The Intractable Female Patient" (July 1972 issue) reflects two symptoms with which the male psychiatrist is all too frequently and intractably afflicted: 1) chauvinism toward female "patients," and 2) the tendency to play God.

I would summarize the gist of Dr. Houck's article in the following manner: Childish but dominating and manipulative female "patients" (with childish but passive "husbands") who find their way into psychiatric hospitals pose a difficult problem. This problem can, however, be resolved by means of the following manipulative efforts on the part of the psychiatrist: Return the "patient" to the community and to her former social roles of wife and mother, which she has been rejecting, and push her away from her characterologic role of childish manipulative dominance toward one of submissive tractability. In addition, encourage her husband to play the supporting role of the strong, dominant, father-like husband in this conjugal drama. The reader is warned, however, that the woman (still referred to as the "patient" although now expected to be a "wife," "mother," and "adult" in addition) "is certain" to rebel against the roles assigned to her by the psychiatrist and "revert in some measure to her previous symptoms."

I find it disturbing that nowhere in this article is any mention made of the psychiatrist's viewing the "patient" or her husband as real human beings. They seem, rather, to be merely puppets whose strings the psychiatrist manipulates in order to move them toward fulfilling roles in a male-dominated nuclear-family drama, which Dr. Houck appears to take for granted as being the desirable end toward which they should strive. Such a state of affairs may or may not be right for any given married couple (after all, there are many other options open to them, either as a couple or as separate individuals), but that should be *their* decision to make, not the psychiatrist's.

Incidentally, I am both a psychiatrist and a male.

HAROLD ALTMAN, M.D.
St. Louis, Mo.

Dr. Houck Replies

SIR: The problem with terms such as "chauvinistic," "manipulative," "dominant," and "submissive" is that they are subject to different interpretations by different people. So, for that matter, is the idea of playing God. Certainly, almost any clinical discussion of a syndrome that mainly involves women is likely to be considered "chauvinistic" by some readers.

There may, indeed, be valid differences of opinion about whether the method of treatment I have outlined is appropriate. But Dr. Altman, in his concern about my "chauvinism," has introduced an idea that was not, in fact, included in my article. Nowhere in the article is there a statement that the patient "is certain to *rebel* [italics mine] against the roles assigned to her by the psychiatrist and revert in some measure to her previous symptoms." My statement was: "In the face of her best resolutions, she is certain to find the stresses of home and family ex-

tremely difficult. When that occurs, she is certain to revert in some measure to her previous symptoms."

Finally, Dr. Altman takes exception to my repeated use of the word "patient," objecting that I have not portrayed the patient or her husband as real human beings. If that is a fair interpretation, then I regret it deeply. The patient is, after all, the ultimate focus of all of medicine and always has been. This fact, it seems to me, is implicit in virtually all medicine, and I am not convinced that one needs to stipulate it.

JOHN H. HOUCK, M.D.
Hartford, Conn.

Treatment for Tardive Dyskinesia

SIR: In the Letter to the Editor "Tardive Dyskinesia and the Rabbit Syndrome During Wakefulness and Sleep" (December 1972 issue) only one line mentions a potential treatment for this iatrogenic syndrome, which is observed more and more frequently among patients who have been exposed to unremitting chemotherapy for years. Can more detailed information be supplied, including the value and dosage of rauwolfia?

JOSEPH A. WINN, M.D.
New York, N.Y.

Testing for Mental Retardation: Comments on Standard Deviations

SIR: This letter is in reference to the article "Comments on the *ICD* Classification of Mental Retardation" by Dr. Joseph Wortis (May 1972 supplement).

In that article Dr. Wortis wrote:

> A test constructed in such a way will inevitably disclose that a minimum of 15 percent of the population utilized (i.e., IQs two standard deviations from the mean) is mentally retarded. . . . The . . . horn of the dilemma is this: If the test is restandardized and is thus adapted to a foreign nation, under the assumption that the intelligence of that nation's populace is normally distributed, one will again find that about 15 percent of the population is mentally retarded. . . .

Such statements disclose the author's ignorance of psychological testing and of elementary statistics. In any normal distribution only 2.2 percent of all cases are two standard deviations below the mean. Hence, if mental retardation is operationally defined as performance two standard deviations below the mean on an intelligence test, then only 2.2 percent of those in any normally distributed population will be labeled as retarded.

David Wechsler has defined mental defectives as those scoring two standard deviations or more below the mean; he concluded, therefore, that only 2.2 percent of any population should be labeled as defective or retarded.

RICHARD H. INGWELL, PH.D.
Indianapolis, Ind.

Dr. Wortis Replies

SIR: Dr. Ingwell is quite right; the first sentence he quotes does contain an unfortunate error. The sentence should read "one or more standard deviations." This error will not be found in the original version of the article (1); it was due, not to ignorance, but to an incomplete interpolation of the standard deviation when proofs were returned. The second sentence, which, unfortunately, Dr. Ingwell did not cite completely (in scientific controversy it is not good practice to quote only half of an adversary's sentence), clarifies the issue. The completed sentence reads ". . . about 15 percent of the population is mentally retarded, since a standardized test must yield roughly that percentage *one or more* standard deviations from the mean" (italics added).

The *International Classification of Diseases*, "A Manual on Terminology and Classification in Mental Retardation" of the American Association on Mental Deficiency, and the APA *Diagnostic and Statistical Manual of Mental Disorders*, second edition (*DSM-II*) all accept IQs of one or more standard deviations below the mean as criteria for mental deficiency. *DSM-II* defines borderline mental retardation as IQs from 68 to 85.

On a normal distribution curve one standard deviation below the mean would mean an IQ below 84 for the Stanford-Binet test; in a random population this should implicate 15.87 percent of the population. Two standard deviations below the mean would bring us to IQs below 69 and would reduce the number of retardates to 2.28 percent of the population.

Since the cutoff point is arbitrary, Dr. Ingwell can define mental retardation at any point he pleases, but widespread current practice puts it at an IQ of 83.

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JOSEPH WORTIS, M.D.
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The Crisis of Financing Residency Training in Psychiatry: A Diagnosis

SIR: An atmosphere of impending or actual crisis in federal support for psychiatric residency training has developed recently Initially this crisis took the form of no new additional funds. More recently, there have been threats from the federal government to decrease financial support for medical student and residency training. Following World War II, as a result of recognition of the psychiatric manpower shortage, a program of financial support for psychiatric education was started. This program fostered the development of departments of psychiatry and expanded training programs where they had not existed previously and changed the locus of psychiatric training from state or private mental hospitals to a general hospital and outpatient base. Further, these departments became the site of a great deal of clinical service and research into complicated biologic, social, and psychologic factors in the mental health field.

In the early 1960s, tensions began to appear between these departments and the National Institute of Mental Health. The earlier stimulus of manpower shortages had somewhat dissipated, and psychiatry gradually moved from being one of the smallest medical disciplines to becoming the third largest. As a result, individuals at planning levels in the federal government began to question whether residency training should continue to be supported by federal funds. Further, it became the common belief that most psychiatrists spent most of their time in private fee-for-service activities; thus it became difficult from a public policy viewpoint to support educational experiences that led to

high incomes and in which services were not delivered to the areas of highest need. In reality, psychiatrists probably spend more time than any other major medical discipline in public service.

The adversaries in this controversy were, on the one hand, the bulk of university leaders in psychiatry, and on the other, smaller segments of that group and the policy setters at NIMH and HEW. The leadership in university departments maintained that they had more experience in educating and that the programs which had been developed were of high quality. Many of these programs were based on parts of human service delivery systems which could be controlled, so that trainees would receive a carefully regulated amount of clinical activity and responsibility and thus might spend sufficient time in clinical service, in learning about psychotherapy, in a didactic curriculum, and in learning about the basic sciences that underlie our understanding of mental health and illness. The psychiatric educators who took this position were, to a considerable degree, those who were opposed to or had limited involvement in community mental health centers.

Other psychiatric educators and public policy leaders took the position that high-quality psychiatric education should be delivered mainly in high-quality comprehensive service systems. The trainee needs exposure to the successes and difficulties of such a service system. If the system is not integrated and comprehensive, then the trainee's experience will be as fragmented as the services within the system.

In the last two years several other forces have joined the argument. In some instances they are exploiting the disagreement for their own objectives. The proposal of the Administration to begin phasing out federal support for residency training in psychiatry, first in fiscal year 1972 and then in fiscal year 1973, were examples. In order to make its case a logical and realistic one it used the sketchy and questionable evidence accumulated by the group supporting the development of community mental health centers.

In a complicated political arena the Congress restored these recommended cuts. Thus, the funding of psychiatric training has become a political issue in which, on the national level, more Democrats support mental health services and training and more Republicans oppose them. Such partisanship should not be a part of the decisions surrounding training and the delivery of services to human beings.

The financing of medical education will probably require rethinking for both the medical student and residency levels. The financing of psychiatric education should occur in this larger context. Some support for training could come from fees derived from service. That, however, cannot and should not be the only or prime basis for supporting psychiatric education. The dangers in such an outcome include too intense a focus on inpatient care, too much involvement with service, too little attention to the knowledge underlying psychiatric activity, and too little emphasis on complex biologic, social, and psychologic understanding. The balance of financial support between local and national sources must also be reviewed and reevaluated. Possible outcomes of such review are: 1) a loan plan, with repayment stipulations; 2) some financing through clinical service; 3) local, state, and some national support based on public need; 4) more efficient training at lower cost; and 5) the channeling of service monies appropriated for current social problems into relevant educational activities that have a mental health component (a current example is drug abuse).

The dilemma that confronts us is whether we continue this nonsensical conflict between adversaries while we destroy the public support and financial base of our educational programs, and ultimately, our profession, or whether we begin once more to plan and to develop conjointly balanced educational programs that meet some of the requirements of each of the opposing groups.

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BOOK REVIEWS

Depression: Comparative Studies of Normal, Neurotic, and Psychotic Conditions, *by Edith Jacobson, M.D. New York, International Universities Press, 1972, 336 pp., $13.50.*

Early in her psychoanalytic career, Edith Jacobson became deeply involved in the most challenging clinical problems: those of the narcissistic states—borderline and psychotic conditions. Following the lead of Karl Abraham, who had had remarkable success in treating manic-depressives, she became engaged in analyzing patients whom few analysts dared to approach, even with psychoanalytically oriented psychotherapy. At this early period ego psychology, and most particularly its technical applications, was in its infancy. As a matter of fact, it is only within the last decade that it has really begun to come into its own. Its enormously fruitful findings, especially the discoveries of early ego developmental phases, have only within the past five years begun to reveal their effectiveness in applications to technique. The work of Otto Kernberg on borderline states, singled out by Jacobson for its outstanding quality, is an excellent example of such avant-garde significance.

Thus this grand old lady of psychoanalysis may rightly be described as a true innovator in both theory and practice. To read the succinct accounts of the innumerable clinical cases that illustrate her hypotheses in the most subtly differentiated way is a most rewarding experience. Here is the master psychoanalyst. Again and again she traces her patients' dynamic and structural constellations down to their infantile sources, correlating them boldly and convincingly with their presenting conditions and relationships to current realities. What she does not enunciate is what we all know—that this would not be possible without the extraordinary charm and maturity of her personality—warm, giving, always reflecting a joie de vivre and an intellectual passion that have not abated with the years.

But this is not a book for the uninitiated. The theoretical formulations are presented in a torrential flood, the ideas literally leapfrogging over each other in their eagerness to be said. It requires a grasp of advanced psychoanalytic theory and often much rereading to distill out the clarifications that the author has so signally contributed to affect theory, the vexing problem of moods, the nature of the primitive ego defenses that characterize borderlines and psychotics, and the kaleidoscope of psychic phenomena surrounding the nature of depressive states.

With respect to her general approach, it is noteworthy that here is one analyst who does not fail to take into account the presence of constitutional, hereditary, and neurophysiological factors in the affective states. Thus, after exhausting all psychogenic considerations in a particular psychotic patient, she was able to reach the conclusion that sudden emergences from long-standing periods of depression, and indeed from apparently deeply regressed schizophrenic states, could be explained only on an organic basis. She deplores the lack of interest in somatic research problems among numerous psychoanalysts as much as the psychiatric and psychoanalytic ignorance of many neurophysiologists, who conduct research studies in psychotic disorders that require "careful differential diagnostic considerations."

In the field of affect theory, which is as yet in an unsatisfactory state from a psychoanalytic point of view, Dr. Jacobson brings in new dimensions of timing, rhythm, and suddenness, discussing them not merely phenomenologically, but from the genetic viewpoint. Chapter 2, which presents direct observational data on smiling and laughter in infants and young children, is most illuminating in this respect. I would have wished that the author had touched upon the relationships between affect and cognition, especially their genesis, but this problem as yet remains largely unexplored.

It is impossible to do justice to the section on depression in a brief review. It must suffice to say that Jacobson alludes to Freud's second anxiety theory, his new ideas regarding the role of aggression, the beginning of structural thinking, and the development of ego psychology as forces in motivating investigations into the problems of depression. However, she deplores the blurring of strict lines between neuroses, borderline states, and psychoses and between the different types of psychotic disorders, which she feels have resulted from overemphasis on purely psychogenetic factors. It is her firm conviction that the psychology of the psychoses can ultimately be understood only by psychoanalytic studies directed to "the individually different, specific psychogenetic factors; the specific structure and nature of the conscious and unconscious conflicts; the characteristic affective and mood conditions; the specific defenses and restitution mechanisms in each group of psychosis."

I could not agree more heartily with this emphasis on specificity. To it, the author has contributed, among other things, an understanding of the interplay between self and object representations, which furnishes a most effective tool in differentiating between specific disorders. I am sure her ever-fertile mind will continue to expand psychoanalytic theory in similar directions in years to come.

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Profession of Medicine: A Study of the Sociology of Applied Knowledge, *4th printing, by Eliot Freidson, Ph.D. New York, Dodd, Mead & Co., 1972, 382 pp., no price listed.*

If asked what makes them professionals, most doctors would probably reply that their professionalism lies not only in their special knowledge but also, and possibly even more importantly, in a certain set of attitudes including a dedicated commitment to their work and a sense of responsibility toward their patients. Eliot Freidson, however, in *Profession of Medicine*, rejects this definition as being difficult to operationalize and certainly unvalidated. He prefers to define a profession in structural terms as an occupation that has achieved a great deal of autonomy in controlling not only the technological but also to a large extent the social and economic aspects of its work. By virtue of public acceptance of its competency in performing the highly valued service of restoring ill people to health, medicine has become the preeminent profession. Society, however, bestows such autonomy on a profession in return for an implicit promise that the profession will keep order in its own house, that is, that it will maintain effective standards of performance by its members.

Having been vested with more or less exclusive jurisdiction over illness, the medical profession finds itself in a very powerful position, which can be and is used for purposes of social control. This is so because illness, in addition to its biophysical determinants, is also an important social phenomenon; and it is the doctor who, by his diagnosis, has the power to define certain individuals as ill and thus to place them in a category with significant responsibilities and privileges. Illness thus may be usefully considered as a form of social deviance, in our country probably the most important form. It differs from the other variety of social deviance, criminality, because ill people are not held to be responsible for their behavior, while criminals are. For instance, if doctors define certain aberrant behavior patterns as mental illness, alcoholism, or drug addiction, these conditions become illnesses subject to treatment rather than punishment.

Dr. Freidson makes a fundamental distinction between "the pure knowledge and theory of the profession which is largely confined to codified science and the knowledge guiding the professional's application of that science to problems of mankind." That is, the manner in which the medical professional applies his scientifically acquired knowledge to the practical problems of his practice is not in the same category as that scientific knowledge, and it is very much subject to individual idiosyncrasy and, even more, to economic and guild considerations.

The vaunted expertise of the profession is often little more than disguised self-interest when applied to the conditions of its work and to the control of incompetent and unethical performance in its ranks. Its claims to infallibility differ from those of labor unions only by being more sanctimonious. This flaw can and should be improved by much more rigorous self-scrutiny, but it cannot be entirely cured by the profession alone, no matter how conscientiously it tries, because the very autonomy that defines medicine as a profession renders it therefore incapable of governing itself in the public interest. Dr. Freidson says that he does not want to abolish this autonomy, only to temper it, but the thrust of his book certainly is in the direction of a drastic modification of the power of the medical profession to regulate itself.

In addition to the main argument of the book as summarized here, there is much more in it to interest, stimulate, and very probably to disturb physicians and provoke them to disagreement. Yet, as stated in the introduction, the profession of sociology has something to say to the profession of medicine. Doctors certainly ought to pay more attention to what sociologists can tell them about their profession than they have in the past. It is possible that their receptivity to sociological criticism will be increased as increased governmental and other forms of third-party scrutiny breach the bastions of their professional autonomy.

The discussion of illness as social deviance, alluded to earlier in this review, will be of particular interest to psychiatrists since it offers another way of looking at the no-holds-barred struggle between advocates of the medical model of psychiatric illness and those who discard such a model entirely. For if from an operational viewpoint illness is in a sense created by the diagnosing activity of physicians, and if all illness (not only that treated by psychiatrists) is a social as well as a biophysical phenomenon, then the absence or relative unimportance of biophysical factors alone will not be sufficient to remove conditions so diagnosed from the category of illness. As long as our society accepts any conditions that doctors diagnose and treat as illness, then the patients of medical doctors specializing in psychiatry will also be considered to be ill.

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The Mind of Adolf Hitler: The Secret Wartime Report, *by Walter C. Langer. New York, Basic Books, 1972, 263 pp., $10.*

This book contains part of the wartime psychological analysis of Adolf Hitler done in 1943 for the Office of Strategic Services, the forerunner of the Central Intelligence Agency. It is an important and timely volume, appearing as it does at a time of increasing interest in psychohistory, and given the circumstances—the absence of the patient, the state of the art in 1943, and the wartime overreactions against Hitler—the study is an outstanding achievement.

The book can be divided into two parts. The first half summarizes and reviews the then available information on the German dictator. This is by far the best part of the book; it reveals the amazing amount of facts known to the Allies about their enemy, and it properly presents and interprets them with the caution this kind of information calls for.

The second half is taken up with the "psychological analysis and reconstruction" of Hitler's character. It is here that most of the book's weaknesses are to be found. The author's professed good intentions notwithstanding, the analysis often degenerates into risky and implausible generalizations based on highly dubious evidence or, worse still, on no evidence at all but on ex post facto tailoring of evidence. For instance, he states, "Not a single patient manifesting Hitler's character traits has grown up in . . . a well-ordered and peaceful home environment." Therefore his early home life *must* have been disruptive, and the scanty evidence available is made to fit a Procrustean bed. In addition, the author states, "As a child he *must* [italics mine] have discovered his parents during intercourse." This statement is repeated so many times that the author finally believes it himself and builds a large part of his theoretical formulations on it.

On the whole the analysis itself greatly suffers from overzealous adherence to some aspects of orthodox psychoanalytic theory, or, to put it differently, it reflects some of the shortcomings of the state of the art in the early 1940s.

Moreover, in view of the author's stated purpose to publish the study "as an historical document," I find two aspects of the book objectionable. First, Langer fails to mention the names of his three collaborators—Henry A. Murray, Ernst Kris, and Bertram D. Lewin. This is especially objectionable in view of the fact that one of them (Kris) is a landmark name. Secondly, comparison with the original text shows that entire passages have not only been edited, but added to. This is especially regrettable in the section on Hitler's "Probable Behavior in the Future," since the original predictions were quite astute.

Regardless of its weaknesses, however, this book will take its place in the history of the profession as the first serious and comprehensive, expert study of a political figure without benefit of direct examination—a role that the profession will be asked to assume, I believe, with increasing frequency. An updated study, making use of the data that have become available since the end of the war, would be most desirable.

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Short-Term Psychotherapy and Emotional Crisis, *by Peter E. Sifneos. Cambridge, Mass., Harvard University Press, 1972, 295 pp., $10.*

Brief psychotherapy is a genus with many species, and one regretful tendency of the proliferating literature in the area has been a failure to differentiate among the various forms that psychotherapy of short duration can take. Dr. Sifneos carefully

avoids that pitfall, however, by concretely defining the two types of brief psychotherapy with which he deals.

Anxiety-suppressive psychotherapy ("crisis support") refers to the use of reassurance, environmental manipulation, hospitalization, or medication to help the patient through an acute crisis. Maximal use of social agencies and involvement of members of the family help to decrease or eliminate as quickly as possible the external factors responsible for the crisis. Even though it usually lasts no more than two months, crisis support tends to produce marked symptom relief and often teaches the patient to avoid the situations that brought him to treatment in the first place.

In contrast to crisis support, crisis intervention (anxiety-provoking therapy) seeks to produce dynamic changes in the patient by challenging his maladaptive reactions to crisis before they become fixed into neurotic symptoms. The therapist's role is that of an "unemotionally involved teacher" who concentrates on current unresolved conflicts. He deliberately avoids dealing with more primitive character traits, since they are unlikely to respond to short-term treatment.

In addition to describing the treatment, the author gives specific criteria for the selection of patients, based on his experience over a 14-year period as Director of the Psychiatry Clinic of Massachusetts General Hospital. He also provides an evaluation of treatment results, based on follow-up interviews. While many patients had only moderate symptom relief, they were less bothered by their symptoms or better able to live with them. The majority of the patients felt that therapy had taught them new ways of dealing with problems. Most striking was an increase in self-esteem that paralleled patients' decrease in self-preoccupation and self-centeredness.

The writing in this book is simple, straightforward, and direct. Clinical material is abundant; it consists not of the usual overpolished vignettes but of extensive excerpts from recordings of sessions. The reader quickly gets the feel of the process of therapy as he sees how concepts and theories are tested in practice. The book can be recommended to supervisors and teachers as a possible introductory text on brief treatment techniques.

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The Psychology of Death, *by Robert Kastenbaum and Ruth Aisenberg. New York, Springer Publishing Co., 1972, 485 pp., $11.95.*

Here is a truly useful book that covers a wide range of concepts, previous writing, and clinical problems surrounding the fact of death. The authors direct their substantial and well-organized efforts toward readers involved in research having to do with death and clinicians involved as counselors, as well as toward those who have a scholarly interest in this subject. A prime quality of the book is its meticulous, detailed summaries of a great number of research studies.

The authors employ a developmental focus throughout, citing research on death fears, ideas and concerns about various kinds of serious illness in children, and the reaction of children of various ages to death experiences. Both developmental stages and developmental issues are amply illustrated by summaries of the literature and the authors' case material and research data.

A section on psychological factors in prolonging or curtailing life is of particular interest. In addition, there are sections on suicide, murder, and illness as they are related to concerns about death, as well as several detailed, well-written sections dealing with comparative historical views of death. The authors' unusual thoroughness gives the reader a great amount of information on such esoteric concepts as premature burial and suspended animation.

As a critical view of findings and concepts in regard to death, this volume is without parallel. It offers a great deal to the teacher, the clinical student of death, and those interested in cultural, philosophic, and anthropological views of death.

Many sections of the book open with questions, many of which will parallel those of the reader and will therefore offer a stimulus to greater involvement in the book. The last section constitutes an excellent epitaph for the volume as well as a spur to the reader: "If an additional measure of care could be given to making the world a better place in which to die, would this not also make our world a better place in which to live?"

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Freud and the Americans: The Beginnings of Psychoanalysis in the United States, 1876–1917, *by Nathan G. Hale, Jr., Ph.D. New York, Oxford University Press, 1971, 558 pp., $15.*

The author, a teacher of history at the University of California at Riverside, apparently has written previously about psychologists, psychiatrists, and emotional illness. His acknowledgments indicate that he has interrogated many professionals and read their books as sources for his information. He not only discusses Freud but also describes in some detail the psychologists and psychiatrists of the period and their kinds of psychiatry before, during, and after Freud's visit to the United States in 1909. The book therefore is an overview of psychiatric history and will be useful for the student and for the beginner, who is rarely taught the roots of what is current.

Nevertheless, the author's attempt to cover his subject under various headings has led to repetitions, and what he has learned from his sources are the formal aspects of psychiatry and psychoanalysis. What is personal and describes Freud as a human being whose personality influenced American psychiatry even more is buried in the Freud archives, not to be opened for many years.

For example, Freud's hatreds included Americans who took to fads inconsistently. Why could he have said that he wished the land had not been discovered? He told me that when Jung reported to him that minimizing the theory of the sex instincts helped Americans to accept psychoanalytic theory, he (Freud) said that psychoanalysis would be destroyed. Many years later he still resented the incident at Putnam's camp in the Adirondacks in 1909 when, while he was writhing on the ground with intestinal cramps, Putnam said, "That's too bad," and walked away.

We are not told about the profound influence on American psychoanalysis of A.A. Brill's abrasive effect on others and of the disasters resulting from his poor translation of Freud's early works. One could go on and on with personality details of great importance for the current state of the art.

Nevertheless, the author does indicate the psychiatric field that formed the ground into which Freud planted the seeds of psychoanalysis. It included a somatic bias inherited from the German school of Kraepelin, Nissl, and Alzheimer, the disguised humanism of Weir Mitchell, and the mystical wave of Bishop Emmanual's movement, whose treatment, my father said at the time, was "not fit for dogs." The puritanical surface morality even led to the original state hospital superintendents designing "moral treatment." The underlying and undercover sexual drives only needed an excuse to break out, based on mis-

interpretation of Freud's theories. It is sad that the American optimism for therapeutic results from psychoanalysis, which was not shared by Freud, was later crushed. Certainly the cathartic method of those early days, before the development of ego psychology and the analysis of resistance, was not the answer to American hopes, and new fads have since been developed.

I will not discuss the author's application of Thomas Kuhn's paradigmatic model of scientific revolutions to psychoanalysis; that has been the subject of several debates in the literature (1). I can only state that the author tries and thus becomes more of a sociologist than a historian, and less effective.

In sum, the book is interesting; future volumes will fill out later periods of Freud's life with the Americans despite his antagonistic view of them. It is to be hoped that subsequent works will be shorter and sharper and will contain more of the essence of psychology.

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ROY R. GRINKER, SR., M.D.
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The Will To Be Human, *by Silvano Arieti, M.D. New York, Quadrangle Books, 1972, 272 pp., $8.95.*

The author is Professor of Clinical Psychiatry and Training Analyst at the New York Medical College and is a member of the faculty at the William Alanson White Institute. His message is an alternative to the behaviorist approach to the role of the will in the human condition, an affirmation of man's humanity, and an encouragement to him to assume his own direction.

Man's will, the capacity to make and implement choices, has been battered and broken by his rearing, his so-called education, social unrest, unremitting wars, depression, shabby ethics, and the erosion of moral authority in Western culture. Often enough he becomes an automaton, responding to his "fate" in the manner depicted in Vachel Lindsay's lilting lines:

> Not that they starve, but starve so dreamlessly;
> Not that they sow, but that they seldom reap;
> Not that they serve, but have no gods to serve;
> Not that they die, but that they die like sheep.

But this is not to mistake the fact for the possibility. Man contains within his skull a most wondrous structure, and it is a continuing mystery why, with it, he is so often unable to improvise. He learns how to perform a task well enough, and when times change and the routine is no longer pertinent he collapses into hopelessness. For this he has a network of more than ten billion nerve cells? Little wonder that the behaviorists regard him in the main as a reacting primate.

Arieti explores the evidence that will exists and that if will has been relinquished it can be resurrected. He traces the evidence for the will from birth to death and the effect of many modifiers upon it. Will develops as the most specifically human characteristic, but it is achieved only by constant striving. Arieti says that although inviolable laws govern the cosmos, the will of man is unpredictable. So if free will exists, it is required of man to carry the burden of responsibility. To the extent that he is free, he is unpredictable and, accordingly, must assume responsibility. Perhaps it is this very burden which causes him to relinquish will so readily along with responsibility.

Behavior does not exist in pure culture. Man is never completely free, and to the extent that he is not, he is to some extent unauthentic and unresponsible, with circumstances likely to blunt his potential creativity. The author's intent is to sketch the way toward autonomy, common good, communion, and peace. He has written a humane book of considerable insight. Even though the sociohistorical times are inhumane, he sees in man the will to be human. We are not necessarily creatures of our environment and our unconscious, since we retain a certain direction of our affairs even in unfavorable circumstances. It is toward enlarging this direction that Arieti explores the potential of the will.

This book is a thoughtful exposition on the role of the will in human affairs and, accordingly, contains something of value for every thinking person.

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The Mental Hospital in the Psychiatric Service: A Case-Register Study, *by J.A. Baldwin, M.A., M.D. New York, Oxford University Press, 1971, 333 pp., $18.*

This book is the brilliant description of Dr. Baldwin's odyssey during the years 1961 to 1968 as Scottish Hospital Endowments Research Trust Fellow in the Department of Mental Health of the University of Aberdeen. He undertook to examine the place of the mental hospital in the contemporary medical and social scene. He sought to understand the nature of the challenge to the 200-year-old dominant and monopolistic position of the mental hospital as the social, legal, and medical embodiment of psychiatric care. Dr. Baldwin studied the relationship of the mental hospital with the service and community environment from which it draws, and to which it returns, its patients. His methodology is best described in his own words (p. 2):

> The objective of the programme of research reported in this book was to design and develop an information system capable of supplying the most obvious deficiencies in data, to use it to provide at least preliminary answers to some of the outstanding planning problems and to evolve practical tools for evaluating management and planning decisions.
>
> The central methodology of the inquiry is epidemiological. The method of record linkage was used to construct a cumulative file, or register, of longitudinal records based on the person as the unit of record. This approach was applied to a population defined both geographically and in terms of an administratively integrated system of mental health services in the north-east of Scotland.

Heeding to the epidemiological line, Dr. Baldwin asks: What observable effects on morbidity result from the actual activities of clinical staff, patients, and administrators within the mental hospital subsystem? He gives an affirmative reply to the question of whether the scientific method rather than the value judgment can be used for the planning and management of mental health services, but cautions, "In practice, in the present state of psychiatry, adequate objective measures are virtually impossible to attain" (p. 3).

The first chapter is an elegant description of the historical evolution of the mental hospital as an institution in its own right. This is followed by a consideration of the requirements

for planning mental health services. Annual net change, cohort models, the pattern and determinants of demand, and models of service function are reviewed, to be discussed in greater detail in later chapters. Chapter 3 gives an excellent review of mental health information systems, with particular reference to the psychiatric case register. Subsequent chapters deal with the dynamics of patient flow, models of mental hospital function, the mental hospital within the context of the service system, and community demand.

Dr. Baldwin draws a number of interesting and, I believe, valid conclusions from his studies. For example, he points out that the attrition of the standing population of the mental hospital is like the decay of radioactivity (p. 178): "Results of application to north-east Scottish mental hospitals show a curvilinear outcome with a relatively short period required to halve the population but a very long one to eliminate it." His cohort studies lead him to believe that the aged senile woman will replace the young male schizophrenic as the main problem for the mental hospitals of the future.

Although the book is liberally supplied with charts, graphs, and some statistical formulas that were beyond my understanding, there is a very satisfactory appendix describing the characteristics of the region containing Aberdeen, Kincardine, Banff, and Moray and the island counties of Orkney and Zetland. An early description of conditions in the Royal Cornhill Hospital, opened in 1800, noted: "On Shrove Tuesday 1873 each patient had brose with a ring in it 'supposed to bring good fortune to its finder.' " Brose, I discovered, is porridge hastily made by pouring boiling water or sometimes milk, beef broth, or the like on meal and stirring them together. Plus ça change, plus c'est la même chose.

Dr. Baldwin's book is a significant contribution to the rational planning of mental health services. It brings a clear understanding of the relationship of the mental hospital to the extramural services. The book is an endorsement of the comprehensive community mental health center and its system of services, and it lends powerful support to current efforts by New York State's Department of Mental Hygiene to fully integrate state hospital and community services. I believe that Dr. Baldwin's studies will find wide acceptance and interest among planners and administrators of mental health services.

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Infantile Autism: Concepts, Characteristics and Treatment, *edited by Michael Rutter, M.D., D.P.M. Baltimore, Williams & Wilkins Co. (exclusive U.S. agents), 1972, 319 pp., $13.75.*

This book, the product of a CIBA Foundation symposium chaired by Leon Eisenberg under the auspices of the London Institute for Research Into Mental Retardation, will be of value to those who wish to place current knowledge about infantile autism in historical perspective.

Recognizing the frequent misuse of the diagnosis, the contributors agree upon the following essential characteristics of infantile autism:

1. It begins during the first two and one-half years of life;
2. It involves a defect in the development of social relationships, a global impairment of language, and rigid or ritualistic patterns of behavior;
3. It is not related to adult schizophrenia;
4. It is not primarily caused by psychogenic influences; and
5. It probably is due to multiple cognitive, perceptual, and language deficits. Although the influence of parenting is recognized, the overwhelming evidence stresses etiological deficiencies in the equipment of the child.

The discussions of classification differentiate childhood psychoses by age of onset, distinguishing three forms: infantile autism; disintegrative or symbiotic psychosis, with onset during early childhood; and schizophrenia, with onset during later childhood and adolescence.

Chapters on the etiology of infantile autism by Ornitz and DeMeyer agree upon the presence of a central integration deficit between sensory input and motor output. They hold the view that the autistic child does not process data efficiently because he *can't*, rather than because he *won't*. They also introduce an element of prognostic hope from maturation of the central nervous system alone, highlighting the need to protect the developing autistic child from the stultifying effects of isolation and understimulation. As an interesting sidelight, Rutter notes that one-third of his series of autistic children developed grand mal seizures prior to their adult years.

Studies of language show that the "echo-box" auditory memory of the autistic child is not impaired; however, "nonsense" is remembered as readily as "sense." Autistic children have language difficulties similar to those seen in aphasic children; however, their impairment spreads beyond speech to other forms of symbolism, such as signs and gestures.

A significant contribution to the treatment of infantile autism is made by Schopler and Reichler through their recognition that parents hold the keys to change in their child and that parents should be involved not only in the direct management of their children but also in the political arena, to press for needed services in their communities. The discussions of behavioral modification programs with autistic children confirm a generally disappointing outcome. More comprehensive educational approaches are recognized, and several chapters are devoted to speech therapy programs.

Omitted in this volume are studies of motivational factors in the autistic child and psychodynamically oriented milieu programs, particularly as they relate to supporting parents, educators, and child care personnel in their frustrating, painstaking, and prolonged work with autistic children.

Eisenberg concludes the symposium by noting recurring fads in the treatment of autistic children. He points out that if operant conditioning methods have done nothing more than inspire hope of changing autistic children, they will have made no small contribution. He appropriately calls attention to unethical promises made by those who involve parents, relatives, and friends in intensive training programs for the autistic child. When the inevitable limited response occurs, it is often attributed to inadequate application of the method, thus only augmenting parents' guilt and obscuring the fact that no simple, universally effective treatment method has been found for infantile autism. The treatment of choice remains coordinated, interdisciplinary management of the autistic child's life, beginning with his family, moving through the development of language and social relationships, and continuing through community-based specialized educational programs.

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Madison, Wis.

Religion and Bereavement: Counsel for the Physician, Advice for the Bereaved, Thoughts for the Clergyman, *edited by Dr. Austin H. Kutscher and Lillian G. Kutscher. New York, Health Sciences Publishing Corp., 1972, 224 pp., $12.50.*

I am afraid that the editors of this book strove to accomplish

too much, with the sad result that they achieved too little. Despite the threefold subtitle that specifies three large groups of potential audiences (and consumers), I find that the book consists primarily of musings by clergymen on death and bereavement. These musings are very uneven in quality, length, and thoroughness. Some read like sermonettes. Others are aphoristic paragraphs without clear connections. Here and there is some poetry. Sprinkled throughout are repeated efforts by Edgar Jackson to teach some basic ideas about grief and grief-work, but these are so fragmented and simplified that one can hardly imagine that his ministerial colleagues or physicians will feel instructed by such scattered teaching endeavors.

When I opened the book and glanced at its table of contents I hoped that I would find a comprehensive desk-reference work on death and bereavement with first-class resource material, for I think this is needed and I expected the president of the Foundation of Thanatology to be interested in producing it, for the use of both clergymen and physicians. Instead, the participating clergymen have primarily produced some edifying meanderings, from whose tone and conceptual level I surmise that they had "the bereaved in general" (whoever they are) in mind.

There is much talk about the virtues of faith when one is bereaved, plus some small efforts to correct mistaken conclusions that one might draw from some religious propositions. For the disaffiliated, disbelievers, or unbelievers there is practically nothing. But if I were a faithful Jew or Christian, and bereft, I would like to have direct recourse to the primary sources of my faith for consolation, courage, or instruction: the great classical prayers, the Psalms, the liturgical treasures of my denomination. Why settle for these musings, albeit they are from men of goodwill, when most faith groups and denominations have superior material to offer? And why settle for small instructional fragments when there are good books on understanding and managing grief?

The major headings in the table of contents are appealing. They consist of A) Understanding Grief, B) Religious Approaches to Death and Mourning, C) Dying, D) Coping with Grief, E) Practical Ministry and Care, and F) Approaches by the Ministry to Recovery from Bereavement. There is also a short (two-page) anthology of selected readings and poems and a list of music selections that contains such strange bedfellows as Wagner's "Gotterdammerung" and Mahler's "Kindertotenlieder." Section F contains the raw data of a survey that the editors conducted among clergymen, widows, and widowers, but they make no attempt to analyze the data or draw conclusions from them.

Although I like the idea of such a work as mapped out in the table of contents, this particular book does not deliver it. I imagine that most of the collaborators themselves will feel dissatisfied with it.

PAUL W. PRUYSER, PH.D.
Topeka, Kans.

This Month's Reviewers

NATHANIEL ROSS, M.D., is Clinical Professor of Psychiatry, State University of New York Medical Center, New York, N.Y.

PAUL CHODOFF, M.D., is Clinical Professor of Psychiatry, George Washington University School of Medicine, Washington, D.C.

IVAN FRAS, M.D., is Director, Department of Child Psychiatry, Broome County Mental Health Clinic, Binghamton, N.Y.

ROBERT J. CAMPBELL, M.D., is Associate Director, Department of Psychiatry, St. Vincent's Hospital and Medical Center of New York, N.Y.

SIDNEY L. WERKMAN, M.D., is Professor of Psychiatry University of Colorado School of Medicine, Denver, Colo.

ROY R. GRINKER, SR., M.D., is Director, Psychosomatic and Psychiatric Institute of Michael Reese Hospital, and Professor of Psychiatry, Pritzker School of Medicine, University of Chicago, Chicago, Ill.

CHARLES D. ARING, M.D., is Professor of Neurology, University of Cincinnati College of Medicine, Cincinnati, Ohio.

FRED B. CHARATAN, M.D., is Chief of Psychiatry, Jewish Institute for Geriatric Care, New Hyde Park, N.Y.

JACK C. WESTMAN, M.D., is Professor of Psychiatry, University of Wisconsin Medical School, Madison, Wis.

PAUL W. PRUYSER, PH.D., is Henry March Pfeiffer Professor, the Menninger Foundation, Topeka, Kans.

Books Received

This listing acknowledges the receipt of recent books. Books of particular interest to the readers of this journal will be reviewed as space permits, and copies of the reviews will be sent to the publishers. Books cannot be returned to the publishers.

Drug Abuse Bibliography for 1971, *compiled by Jean Cameron Advena. Troy, N.Y., Whitston Publishing Co., 1972, 400 pp., $15.*

Le Psychodrame: Une Approche Psychanalytique, *by Michel Basquin, Paulette Dubuisson, Bertrand Samuel-Lajeunesse, and Geneviève Testemale-Monod. Paris, Dunod, 1972, 131 pp., 18 F (paper).*

Mind and Context in the Art of Drawing, *by Kenneth R. Beittel. New York, Holt, Rinehart and Winston, 1972, 268 pp., no price listed.*

In Search of a Response, *by Leida Berg, M.D., and Harold Steinberg. New York, Tiresias Press, 1973, 979 pp., $20.*

Got Me on the Run: A Study of Runaways, *by Richard Bock and Abigail English. Boston, Beacon Press, 1973, 237 pp., $7.50.*

Alcoholism and Driving, *by Carl J. Bridge, M.D. Springfield, Ill., Charles C Thomas, 1972, 81 pp., $7.*

The De-Addiction Process: Studies in the De-Addiction of Confirmed Heroin Addicts, *by Leon Brill. Springfield, Ill., Charles C Thomas, 1972, 162 pp., $9.50.*

Drugs and Human Behaviour *(1970), by Gordon Claridge. Baltimore, Penguin Books, 1973, 262 pp., $1.85 (paper).*

Mental Health and Social Change: An Annotated Bibliography, *edited by George V. Coelho. National Institute of Mental Health. Washington, D.C., U.S. Government Printing Office, 1972, 379 pp., $3 (paper).*

Social Change and Human Behavior: Mental Health Challenges of the Seventies, *edited by George V. Coelho and Eli A. Rubinstein, with Elinor Stillman. National Institute of Mental Health. Washington, D.C., U.S. Government Printing Office, 1972, 237 pp., $2 (paper).*

Philosophy and Technology of Drug Assessment, vol. 3: The Philosophy of Evidence, *edited by Joseph D. Cooper. Washington, D.C., Interdisciplinary Communication Associates, 1973, 296 pp., $8.50 (paper).*

Katamnesen bei kastrierten Sittlichkeitsdelinquenten aus forensisch-psychiatrischer Sicht, *by F. Cornu. New York, S. Karger, 1973, 132 pp., $15.40 (paper).*

Migration and Functional Psychoses in Oslo, *by Odd Steffen Dalgard. Oslo, Universitetsforlaget, no date listed, 168 pp., no price listed (paper).*

Interpersonal Messages of Emotion, *by Allen T. Dittmann, Ph.D. New York, Springer Publishing Co., 1973, 227 pp., $7.95.*

Total Management of the Arthritic Patient, *edited by George E. Ehrlich, M.D. Philadelphia, J.B. Lippincott Co., 1973, 257 pp., no price listed.*

Your Mind Can Stop the Common Cold, *by Lucy Freeman. New York, Peter H. Wyden, 1973, 235 pp., $5.95.*

The Laboratory of the Body. Dental Research: Science's Newest Frontier, *by Lawrence Galton. New York, Pyramid Books, 1972, 220 pp., 95¢ (paper).*

Mysteries of the Mind: The Drama of Human Behavior, *by Robert M. Goldenson, Ph.D. Garden City, N.Y., Doubleday & Co., 1973, 290 pp., $7.95.*

Research in Comprehensive Psychiatry: Festschrift for Ralph M. Patterson, *prepared by Harold Goldman. Columbus, Ohio State University, 1972, 280 pp., no price listed (paper).*

The VIP with Psychiatric Impairment, *by the Group for the Advancement of Psychiatry. New York, Charles Scribner's Sons, 1973, 65 pp., $1.95 (paper).*

Psychopathology: Contributions from the Social, Behavioral, and Biological Sciences, *edited by Muriel Hammer, Ph.D., Kurt Salzinger, Ph.D., and Samuel Sutton, Ph.D. New York, John Wiley & Sons, 1973, 559 pp., $18.95.*

Dying, *2nd ed., by John Hinton. Baltimore, Penguin Books, 1973, 209 pp., $1.65 (paper).*

Psychoanalysis and Contemporary Science: An Annual of Integrative and Interdisciplinary Studies, vol. 1, *edited by Robert R. Holt and Emanuel Peterfreund. New York, Macmillan Co., 1972, 391 pp., $14.95.*

Family Psychiatry for Child Psychiatrists, *by John G. Howells. Ipswich, Suffolk, England, Institute of Family Psychiatry, 1972, 50 pp., 50p (paper).*

Modern Perspectives in Psycho-Obstetrics, *edited by John G. Howells, M.D., D.P.M. New York, Brunner/Mazel, 1972, 469 pp., $20.*

Intellectual Functioning in Adults, *edited by Lissy F. Jarvik, Carl Eisdorfer, and June E. Blum. New York, Springer Publishing Co., 1973, 172 pp., $7.50.*

Direct Psychotherapy: 28 American Originals, vols. 1 and 2, *edited by Ratibor-Ray M. Jurjevich. Coral Gables, Fla., University of Miami Press, 1973, 883 pp., $35.*

Child Advocacy: Report of a National Baseline Study, *by Alfred J. Kahn, Sheila B. Kamerman, and Brenda G. McGowan. New York, Child Advocacy Research Project, Columbia University School of Social Work, 1972, 184 pp., $2 (paper).*

La faim et le corps: Une étude psychanalytique de l'anorexie mentale, *by Evelyne Kestemberg, Jean Kestemberg, and Simone Decobert. Paris, Presses Universitaires de France, 1972, 301 pp., no price listed (paper).*

Modern Approaches to the Diagnosis and Instruction of Multi-Handicapped Children, vol. 9. Structopathic Children, part I: Description of Disturbance Type and Strategies, *by J.F.W. Kok. Portland, Ore. (P.O. Box 4347), International Scholarly Book Services (distributor), 1972, 123 pp., $15.85.*

Modern Approaches to the Diagnosis and Instruction of Multi-Handicapped Children, vol. 10. Structopathic Children, part II: Results of Experimental Research of Structuring Group Therapy, *by J.F.W. Kok. Portland, Ore. (P.O. Box 4347), International Scholarly Book Services (distributor), 1972, 119 pp., $15.85.*

Modern Clinical Psychiatry, *8th ed., by Lawrence C. Kolb, M.D. Philadelphia, W.B. Saunders Co., 1973, 668 pp., $13.*

The American Heroin Empire: Power, Profits, and Politics, *by Richard Kunnes, M.D. New York, Dodd, Mead & Co., 1973, 208 pp., $5.95.*

The Rorschach Technique with Children and Adolescents: Application and Norms, *by Eugene E. Levitt, Ph.D., and Aare Truumaa, Ph.D. New York, Grune & Stratton, 1972, 141 pp., $7.95.*

A Gallery of Ghosts: An Anthology of Reported Experience, *by Andrew MacKenzie. London, Arthur Barker, 1972, 160 pp., £1.85 (U.K. only).*

Perspectives in Group Psychotherapy: A Theoretical Background, *by P.B. de Maré. New York, Jason Aronson Book Publishers, 1973, 201 pp., $10.*

Readings in Animal Behavior, *2nd ed., edited by Thomas E. McGill. New York, Holt, Rinehart and Winston, 1973, 468 pp., no price listed (paper).*

The Prevention of Juvenile Delinquency: An Experiment, *by Walter C. Reckless and Simon Dinitz. Columbus, Ohio State University Press, 1972, 246 pp., $12.*

Conquering Loneliness, *by Jean Rosenbaum, M.D., and Veryl Rosenbaum. New York, Hawthorn Books, 1973, 173 pp., $5.95.*

Homosexuality: The Psychology of the Creative Process, *2nd printing, by Paul Rosenfels, M.D. Roslyn Heights, N.Y., Libra Publishers, 1973, 164 pp., no price listed (paper).*

An Introduction to Physical Methods of Treatment in Psychiatry, *5th ed., by William Sargant, M.A., M.B., Eliot Slater, M.A., M.D., with Desmond Kelly, M.D. New York, Jason Aronson Book Publishers, 1973, 304 pp., $12.50.*

Causal Thinking in the Health Sciences: Concepts and Strategies of Epidemiology, *by Mervyn Susser. New York, Oxford University Press, 1973, 170 pp., $4.50 (paper).*

Autism and Childhood Psychosis, *by Frances Tustin. New York, Jason Aronson Book Publishers, 1973, 188 pp., $10.*

Evaluating a Community Psychiatric Service: The Camberwell Register, 1964–71, *edited by J.K. Wing and Anthea M. Hailey. New York, Oxford University Press, 1972, 446 pp., $26.*

Group Therapy: 1973, An Overview, *edited by Lewis R. Wolberg and Emanuel K. Schwartz. New York, Intercontinental Medical Book Corp., 1973, 228 pp., $12.50.*

OFFICIAL ACTIONS

Fall Committee Meetings

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The Council on Medical Education and Career Development

ALBERT J. SILVERMAN, M.D., CHAIRMAN

THE MEETING of the Council on Medical Education and Career Development began as requested with extensive discussion of the future of the component parts of the Council. A discussion was also initiated on a proposed reorganization of the Council along more functional lines. This discussion will be continued during the Council's early spring meeting, and the members anticipate presenting a plan for proposed reorganization to the Reference Committee shortly afterward. The Council also made certain recommendations relating to its component parts that will be noted in relationship to its specific reports.

The Council received with thanks a report on the forthcoming Medical Education Conference from Dr. Ewald Busse. The Council recommended that psychopharmacological education be explored during the conference and also recommended liaison with the American College of Neuropsychopharmacology to achieve this end.

The Council received the request that the wording of the APA Membership Certificate be changed to read: "Qualified Psychiatrist." The Council recommended that since a method of certification in psychiatry already exists and since APA is not a qualifying organization, the proposed change not be approved.

The Council considered the request that a *Task Force on Audiovisual Definitions in Psychiatry* be established. While agreeing in principle that the project had a great deal of merit, the Council recognized that the problems of standardization are considerable and recommended that this proposal be considered in the Council on Research with the Task Force on Nomenclature and Statistics and Committee on Public Information acting as liaisons.

The Council then considered the matter of licensure and certification of specialists as well as that of relicensure and recertification. In view of the fact that an examination route already exists to certify that a person is qualified as a psychiatrist, the Council was opposed to setting up another route. The Council approved the following statement and recommended its adoption as policy by APA:

> Council is in favor of relicensure and recertification of the psychiatrist provided there is full equity and safeguards for the consumer and for the psychiatrist. The consumer would require protection with respect to the competency of the psychiatrist, his need for a psychiatrist, and the status of the patient/doctor relationship.
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The Council endorsed the recommendation which asked that 'Lifetime Learning for Psychiatrists" be given wider distribution and be underwritten by APA if funding can be obtained.

The committee discussed the certification of a psychiatrist upon taking a comprehensive examination at the conclusion of

his residency and recommended recertification by examination (or possibly by attendance at compulsory courses) at certain intervals. In response to this item the Council called attention to its statement prepared in this regard (cited previously). Also, as noted before, the Council will continue to discuss this issue in reference to the recommendation made by the Task Force on Continuing Education.

The committee recommended that the pamphlet "What Is a Psychiatrist?" be rewritten by staff. APA staff informed the Council that the Board of Trustees would study and further handle this item.

The committee recommended that APA not become a center for the development or distribution of audiovisual materials but instead that the NIMH National Clearinghouse for Mental Health Information be used for collating information about audiovisual material available throughout the country. The Council recommended approval of this item but with a change in wording as follows: "Other organizations such as the National Clearinghouse for Mental Health Information of NIMH be used for collating information about audiovisual material throughout the country."

The report from the *Task Force of Residents*, John M. Scanlan, M.D., chairman, was received with thanks. The Council approved the recommendation that the current task force be dissolved at the conclusion of its work after the annual meeting in Hawaii and recommended that a similar group be appointed at that time. The idea of a group concerned with the involvement of young members of our profession in APA affairs was considered to be an excellent one. However, the issues associated with involvement were not considered to be appropriate for the Council on Medical Education and Career Development. The Council therefore recommended the development of a committee or commission on residents or young members, to be assigned to the Council on Internal Organization or to the Assembly of District Branches.

The Council also received a statement from the task force entitled "Psychiatry Training Funds." This arrived too late to be considered and was held over for the spring meeting.

The Council read the memorandum sent from Dr. Walter Barton, which reminded all councils requesting immediate resident representation of the usual channels through which such requests must go. The Council agreed in principle to the idea of having residents and young members represented at all levels of APA. In this context it recommended that a group of young members work with the Council on Internal Organization or with the Assembly of District Branches.

The Council recommended approval of the request that a resident be selected to attend the meeting of the American Association of Psychiatric Departmental Chairmen in November 1972 and the meeting of Resident Training Program Directors in January 1973. The task force requested permission to have an extra meeting in order to plan a program for the residents' forum at the APA annual meeting, to draft a final report of the task force's activities, to plan a national residents conference, to clarify the relationship between the task force and the Falk Fellows, and to develop a clear statement about the goals and objectives of the recommended new Task Force on Residents. The Council approved these requests.

The report of the *Committee on Academic Education*, John F. McDermott, M.D., chairman, was received with thanks. This committee saw its next phase as one of involvement with current issues in general education. This included looking at non-medical education and at problems related to child development, the underlying theme being primary preventive psychiatry and the development of a number of task forces on school busing, education of teachers in child development, racism, special education programs, etc. The Council recommended continuing this committee along the lines suggested here.

The report of the *Task Force on Family Life Education*, Arnold M. Kallen, M.D., chairman, was received with thanks. A manual on this topic was being prepared and should be finished in the allotted time. Cooperative ventures concerning this topic were being developed between APA and other groups.

The task force requested APA endorsement in order to enable it to plan official APA meetings to which representatives of other organizations would be invited. If this is endorsed, the task force would seek funds separate from the APA budget for these activities. The Council recommended approval and also recommended another year of life for this task force, if necessary, to get the activities noted here under way.

The report of the *Committee on Certification in Administrative Psychiatry*, Archie R. Foley, M.D., chairman, was received with thanks. The Council approved the revised edition of the rules and regulations and of the application forms that had been previously received. The Council also noted the editorial changes and approved their inclusion.

The Council did not approve that portion of the report which indicated that "the Committee will assume responsibility for dissemination of the information in the new guidelines to those segments of the profession which their members represent and for working for greater reliance on the certification procedure as a meaningful criterion for including administrative competence." The Council expressed the belief that the approval of all activities of this committee should come from official APA channels; this would include dissemination of guidelines. The Council further had serious questions about any APA committee having the responsibility for certification. (About two years ago the Council referred this matter to the ABPN, which sent it back stating they already had too much to do without taking this task on.) The Council recommended that this matter again be referred to the Board as falling within its responsibility. The Council decided to discuss this item further at its spring meeting.

The Council questioned the advisability of holding an examination during the Hawaii annual meeting since it had been informed that only a limited number of applicants would like to take it then. However, it was decided that if agreements had already been reached with APA leaders regarding such an examination, the Council would not recommend disapproval.

The task force report referred to a document summarizing the deliberations of the Task Force on Continuing Education in Administration for Psychiatrists, which was sponsored by the APA Office of Continuing Education and funded by the Continuing Education Branch of NIMH. The Council had not received this document and could not respond.

The committee also stated that it would function with greater continuity and cohesiveness if its members had longer appointments such as would be obtained by becoming a commission. The Council recommended that if the certifying function now carried out by this committee remained within APA and was not transferred to the ABPN, as recommended, then serious thought should be given to changing the committee to a commission.

The Council on Mental Health Services

EDWARD O. HARPER, M.D., CHAIRMAN

DURING THE PAST YEAR, the Council on Mental Health Services, together with its task forces and committees, has worked diligently to prepare position statements and make recommendations that, it is hoped, will improve the delivery of mental health services to all U.S. citizens.

The *Task Force on Aging*, Alan I. Goldfarb, M.D., chairman, submitted a position statement on aging that embraced many of the recommendations made by the 1971 White House Conference on Aging. The report emphasized the following six major points:

1. APA believes that there must be comprehensive and effective delivery of mental health services for all citizens. There is urgent need for improvement in the mental and physical health care of elderly citizens. A comprehensive system of health care should be established that provides for: a) proper evaluation of the individual's health needs; b) psychiatric, medical, social, and supportive measures, not only to maintain health, but also to rehabilitate the sick and infirm; c) continuity of long-term care; and d) preventive health measures together with an ongoing educational program encouraging the preservation of health in all ages.

2. The health services provided by hospitals and health and welfare agencies should be carefully correlated and integrated with other agencies providing for the well-being of the aged. Because of their multiple disabilities, geriatric patients should have the same quality of inpatient and outpatient care in general hospitals as do all other patients. Inpatient and outpatient facilities of state psychiatric hospitals should be upgraded and expanded to provide for those elderly patients whose mental and physical infirmities necessitate long-term hospital care. Expanded and improved social services should also be available.

3. Elderly patients with no clearly defined psychiatric illness may have their needs for protective care best served in comfortable, friendly, home-like congregate living accommodations that have adequate psychiatric supervision and staff.

4. Substantial increases in financial support for all medical and psychiatric services are immediately necessary. Funds should be made available from federal, state, county, and city governments and from third-party payment, together with such fees from patients as do not impose a financial burden. Medicare benefits should definitely be increased in the following manner: a) there should be elimination of all deductibles; b) psychiatric services should be paid for on the same basis as all other medical and surgical services; c) there should be no exclusion of psychiatric patients from nursing home care when this is most helpful; and d) funds should be divided among services, research, and education.

5. The curricula of medical schools should provide for the teaching of geriatrics including not only psychiatric, but also medical and surgical, illnesses. Instruction concerning the needs of elderly citizens should be included in the educational programs of nurses, medical aides, and paramedical personnel.

6. APA strongly advocates the establishment of a Center on Aging in the National Institute of Mental Health and a National Institute of Aging, with special emphasis on the study of biomedical problems. APA also urges its President to appoint an interdisciplinary commission on aging for the overall monitoring of government agencies and pledges its active participation in the deliberation of such a body.

The *Task Force on Peer Review*, Rives Chalmers, M.D., chairman, submitted a far-reaching report recommending guidelines for peer review (see March 1973 issue of the *Journal* for position statement). This was approved by the Board of Trustees and the Assembly of District Branches.

The report of the task force recognized the great public insistence that there be quality and cost control in all phases of health care delivery. The philosophy underlying peer review is based on the principle of quality health care for all. The report stressed the need for positive, effective action on the part of organized psychiatry in promoting the development of a peer review organization at both the district branch and the national levels. A cardinal goal of peer review is to improve the quality of care through the continuing education of physicians, other providers, and patients in the method for providing and receiving better care at minimum feasible cost. Accordingly, the task force recommended that APA establish a program for peer review that would function within each district branch, together with a standing APA committee.

Each district branch peer review organization should take an active part in consulting with the local medical peer review organization and with third-party carriers. This peer review organization should be made up of three knowledgeable members of the district branch who have varied experiences. It should function as a specialty consultant peer review organization and as a broader medical society peer review mechanism. It would serve as a regional extension of APA.

Continuing feedback to district branch membership of peer review experiences, decisions, and accompanying changes in practice is the basic element in developing an effective peer review organization. A well-defined and broadly publicized input mechanism should be available to physicians, care recipients, and interested third parties on questions concerning patient-generated services.

There should be a clearly established appeals chain for disagreements over decisions, preservation of confidentiality, immunity from litigation, and protection from discovery. The decisions and records of the organization's proceedings should have adequate safeguards to prevent their use against the physician whose services are being reviewed. Eventually, review procedures should be standardized with the hope that a multiple-specialty medical society will increase the objectivity of the entire peer review mechanism.

The development of the local peer review organization and the success of a constructive mechanism will depend on the successful integration of three major programs: 1) an automated system for the collection, identification, dissemination, and storage of data, with an available retrievable system; 2) a research structure to provide exploration into problem areas as they are delineated; and 3) an educational program designed to effectively return accumulated information to the physician, recipients of care, and third-party carriers. According to the task force report major objectives would be: 1) the education of physicians: peer review would be an effective means for promoting communications concerning quality of care and unusual concepts of fees prevailing in a given medical community; 2) the evaluation of quality: within this area continuing feedback through an accepted educational program will further the effectiveness of any information gathered; 3) evaluation of costs; and

4) evaluation of quality/utilization.

Data concerning the use of a psychiatrist's time—the hours devoted to patient care, administration, teaching, and supervision—could be obtained. This in turn may make possible new therapeutic approaches that would reduce the time required of the psychiatrist and paramedical personnel and the cost to the patient without compromising the quality of the care.

The Council has requested this task force to carry on its work through the period of implementation.

The *Task Force on Psychiatric Rehabilitation in Correctional Systems* is the new name of the group formerly called the Task Force on Prison Reform. This name reflects more clearly the charge that the task force had been given. The new chairman is Francis A. Tyce, M.D.; he replaced Harold Janney, M.D., who asked to be relieved of his responsibilities because of illness. The Council expressed its regrets that it was necessary for Dr. Janney to relinquish his membership.

The Council did not recommend APA endorsement of the proposed White House Conference on Correction; it appeared that this conference would focus primarily on detention and penology rather than on the problems centering around rehabilitation.

The *Task Force on Private Psychiatric Hospitals*, John H. Houck, M.D., chairman, was composed of the same members who submitted the report on the status of state psychiatric hospitals. In that report emphasis was placed on the importance of the state psychiatric hospital in the mental health of the community despite the counter claims of those who would downgrade its function. The task force was collecting data on the bed capacity and the cost per day of the private psychiatric hospital as compared with the state hospital. The quality and the type of care delivered in these hospitals was being studied and will be compared with the cost and quality of care delivered in public hospitals.

The *Committee on Financing of Mental Health Care*, John M. Cotton, M.D., chairman, met with key individuals in Medicare, Medicaid, CHAMPUS, and others. The committee has continued to be actively involved in various local and national efforts relating to health insurance and the perplexing problem of the cost of psychiatric care.

The American Hospital Association has studied the cost of medical services in depth. Dr. James Johnson participated in these discussions. When the results of the study are available, APA will participate in a national conference on the cost of medical services. The committee proposed a statement on the National Association for Mental Health's position statement "Categories of Service for Mental Health Coverage Under National Health Insurance."

The *Task Force on Suicide Prevention*, Matthew Ross, M.D., chairman, was trying through every possible channel to gather hard data on the incidence of suicide among psychiatrists. It is extremely difficult to obtain accurate data about this group. The task force expressed the belief that special emphasis should be placed on psychiatrists since too little attention has been paid to those colleagues who are in desperate need of psychiatric help.

The Committee on Federal Government Health Services, Van Buren O. Hammett, M.D., chairman, has been studying many facets of the health services in the Armed Forces. It has been immediately concerned with the problem of drug abuse in the Armed Forces. The committee was also looking into the status of psychiatric services in the Veterans Administration.

The Council has been concerned about standards for community mental health centers. A task force was not appointed to study this problem since a Task Force on Evaluation Research in Community Mental Health Centers already exists under the Council on Research and Development. An ad hoc committee will study the Nader report on community mental health centers. The Accreditation Council on Psychiatric Facilities has been studying this problem, and the Task Force on APA Standards for Psychiatric Facilities, which the Council has established, will make necessary recommendations concerning standards for community mental health centers.

The Council recommended to the Ad Hoc Committee on Current Procedural Terminology that the AMA document should include a provision for psychiatric consultation with a private and/or public health welfare agency and that a preparatory statement be made concerning the use of procedural terminology and especially the coding of time.

The Council established a *Task Force to Study the Status of Nursing Homes and Other Extended Care Facilities*, Arthur L. Arnold, M.D., chairman. The charge given to this task force is to evaluate the quality of care and the standards to be met by these facilities and to make necessary recommendations for improving the care given to patients in these facilities.

The quality of care following discharge from state psychiatric hospitals is at times unbelievably poor. The care and support that many of these patients receive after hospitalization is grossly inadequate. This issue, however, will be considered by the Council at the next meeting.

The Council also established a *Task Force on APA Standards for Psychiatric Facilities*, William S. Allerton, M.D., chairman. The charge of this task force is to review and revise the APA standards where necessary, giving careful attention to the recent Alabama court decision concerning psychiatric hospitals. This decision has made it necessary for APA to again carefully review the standards for psychiatric facilities.

The Council established a *Task Force on Collaboration of the Psychiatrist and Consumer in Psychiatric Programs.* The charge of the task force is to consider the mutual roles of the psychiatrist and the consumer in the delivery of mental health services, to study and evaluate existing models of participation, and to make recommendations for future collaboration. The chairman and members of this task force have not yet been appointed.

Staff is working with the draft of the report from the *Task Force on Private Enterprise Models.* The name of the document has been changed, and it was announced that the new draft will be available soon. The Assembly of District Branches now has a Task Force on Private Practice.

The Reference Committee recommended to the Board of Trustees that the current Commission on Manpower be allowed to terminate in May 1973 and that an advisory group to the Division on Manpower Research and Development be formed and assigned to the Council on Mental Health Services for administration and funding.

The Council referred for study to the Task Force on Peer Review and to the Task Force on Psychiatric Rehabilitation in Correctional Systems the possibility of an increase of psychosurgical procedures and the reactions to them.

The Council was delighted to have the following Falk Fellows participate in its activities, its committees, and its task forces: Drs. Travis W. Jenkins, John Looney, Richard Dorsey, and Arthur B. Schuler. They brought to its deliberations a special expertise that was very much needed.

The Council on Research and Development

RUSSELL R. MONROE, M.D., ACTING CHAIRMAN

DURING THE FALL OF 1972, Sidney Malitz, M.D., was recovering from two illnesses so the vice-chairman of the Council on Research and Development assumed the role of acting chairman. It was reported that Dr. Malitz would resume his activities as chairman of the Council at the Reference Committee meeting, February 8–9, 1973.

Two task force reports were approved by the Council with the recommendation that these be published as task force monographs. These recommendations were submitted to the Reference Committee.

The first report, entitled "Behavior Therapy in Psychiatry," was completed by the *Task Force on Behavioral Therapy*, Carl Lee Birk, M.D., chairman. This task force was established to study the historical development of behavior therapy, its efficacy for the treatment of psychiatric problems, its current forms and uses as well as potential abuses, and its relationship to dynamic psychiatry. The Council felt that this would be an invaluable introductory monograph for psychiatrists, psychiatric educators, psychiatric residents, and medical students. It is hoped that the report will provide an impetus for mutually beneficial interactions between dynamic psychiatrists and behavioral therapists.

The second report, also recommended for publication as a monograph, was that of the *Task Force on Vitamin Therapy in Psychiatry*, Morris A. Lipton, M.D., chairman. This was a scholarly review of the 20-year history of Vitamin B^3 therapy (nicotinic acid or nicotinamide) for the treatment of schizophrenia. The report also included an up-to-date summary of attempts to replicate the claims of proponents of this treatment method. It is hoped that with the publication of this report an APA position statement on megavitamin therapy can be issued.

In collaboration with the *Commission on Drug Abuse*, Daniel X. Freedman, M.D., chairman, a position statement on the value of amphetamines in the pharmacologic armamentarium of the psychiatrist will be presented to the Reference Committee, the Board of Trustees, and the Assembly of District Branches for their consideration.

On recommendation of the Council, the Reference Committee approved the discontinuation of the *Task Force on Systems Theory in Community Mental Health* and of the *Task Force on Current Problems in Research Support.* However, the Reference Committee suggested that the Council might consider a task force that would develop general guidelines for research support.

Membership was approved for the revived *Task Force on Lithium*, Irvin M. Cohen, M.D., chairman. This task force will investigate the status of lithium therapy in other than the manic phase of manic-depressive psychosis.

Four new task forces were recommended by the Council and approved by the Reference Committee. These include: 1) a Task Force on Psychiatric Aspects of Aerospace Program, 2) a Task Force on Biofeedback, 3) a Task Force on Meditation, and 4) a Task Force on Research Aspects of Psychosurgery.

The *Task Force on Research Aspects of Psychosurgery* will work in liaison with a similar task force under the Council on Emerging Issues evaluating the social impact of psychosurgery. The task force under the Council on Research and Development will focus on a critical evaluation of follow-up studies and on the scientific merits of current research in psychosurgery.

The *Task Force on Evaluation Research in Community Mental Health Centers*, Gerald L. Klerman, M.D., chairman, completed a report in 1971; 2,000 copies were printed and distributed to mental health centers throughout the United States. This task force was continued at the request of government agencies and now functions as a consultant to them. The task force has been in consultation with NIMH and HEW regarding a program for evaluation research. It is now preparing for consideration by the Council a brief paper defining the issues, including the priorities, scope, and administrative mechanisms of evaluation research.

The *Task Force on Methadone Therapy and Narcotic Antagonists*, Roger E. Meyer, M.D., chairman, was active in developing a survey questionnaire utilized by the Food and Drug Administration (FDA) and the Special Action Office of Drug Abuse Prevention for surveying methadone maintenance treatment centers throughout the United States. The task force presented to the Council preliminary data collected during this survey. It also reported that it had submitted 19 recommendations to FDA regarding the evaluation of effective methadone programs. A report will be submitted to the Council before its next meeting regarding current guidelines for methadone therapy, along with a report on the status of narcotic antagonists as a therapeutic regimen for the treatment of addicts.

The *Task Force on Nomenclature and Statistics*, Henry Brill, M.D., chairman, reported that it was cooperating at the international level in preparing a glossary to be included with the new ninth edition of the *International Classification of Diseases (ICD-9)*, which is now in preparation and is expected to be published in 1976. Dr. Brill spent from August 28–September 4 in Geneva with Jack Ewalt, M.D., working on an advanced draft of this glossary. Dr. Brill reported that a major change in *ICD-9* will be the adoption of dual coding of organic states, utilizing one number for the clinical syndrome and another number for etiology. He also anticipated major changes in the child psychiatry section. Otherwise, he felt that the final version will not vary extensively from *ICD-8*.

The *Task Force on Clinical Aspects of the Violent Individual*, Donald P. Kenefick, M.D., and John R. Lion, M.D., co-chairmen, anticipated that it would have a report available for consideration by the Council at its spring meeting. It hoped that the report would be published as a guideline for the identification of and treatment planning for the violent individual.

Two new task forces have had their first meeting in liaison with the Council and are now developing specific changes. These are the *Task Force on Ethical Problems in Psychiatric Research*, Sidney Merlis, M.D., chairman, and the *Task Force on the Effects of Television on Mental Health*, James H. Ryan, M.D., chairman.

The *Task Force Relating to Research Evaluation of Racism* has not been activated. However, under the impetus of Walter W. Shervington, M.D., who is observer-consultant to the Council, it was hoped that this task force would be constituted by the next meeting of the Council.

A position statement formulated by the disbanded Task Force on the Confidentiality of Medical Research Records was submitted to the Reference Committee for approval of publication. This report was approved by the Reference Committee in

1970 but has not been published. The request of the task force was approved by the Reference Committee and by the Board of Trustees and will be submitted to the Assembly of District Branches for its approval.

Dr. Albert B. Silverman, chairman of the Council on Medical Education and Career Development, pointed out that the Commission on Manpower was to be disbanded in 1972. He suggested that inasmuch as the Division of Manpower Research and Development was part of the staff function of APA, a new committee to advise this office should be appointed and that such a committee might be assigned to the Council on Research and Development. Dr. Monroe suggested that such a committee would be appropriate under the aegis of the Council on Mental Health Services, although specific activities that call for a task force might be assigned to the Council on Research and Development. This recommendation was accepted by the Reference Committee.

Dr. Monroe raised the issue of task forces' representing themselves to outside agencies, either government or private, as official spokesmen for APA. It was recommended and generally approved by the Council chairman and the Reference Committee that specific detailed guidelines for the activities of task forces should be given to their chairmen and should particularly emphasize that statements made to outside agencies be cleared with the Council, Reference Committee, and Assembly of District Branches. It was suggested that in an emergency, telephone conferences regarding important matters could be arranged.

The Council expressed its appreciation for the valuable participation of the Falk Fellows during the fall meeting. These were Stuart C. Yudofsky, M.D., and Fritz Henn, M.D.

The Council on National Affairs

LAWRENCE C. KOLB, M.D., CHAIRMAN

THE COUNCIL ON NATIONAL AFFAIRS was in the process of reorganization in that three new members, Drs. J.I. Barish, D.S. Sanders, and its chairman, have been newly appointed. It is fortunate that its previous chairman and vice-chairman, Drs. Alexander H. Leighton and James M. Bell, continue. The Council pursued its work through telephone conferences held in July and November 1972 and in January 1973. The Council received and reviewed reports from the various committees and task forces assigned or appointed under its jurisdiction.

The Council heard and received a full report of the actions of the *Task Force on Aggression and Violence*, John P. Spiegel, M.D., chairman, from its inception in May 1968. Over the four years the task force reviewed the reports of the Eisenhower Commission; framed a number of hypotheses and questions for research pertaining to violent behavior; played a major role in developing the program of the annual meeting in Washington, D.C., on violence and alternatives to violence; reviewed various books on these subjects for *Psychiatric News*; conducted a questionnaire survey of the membership at the 1971 annual meeting to determine those who were interested in work in aggression and violence; developed, arranged, and participated in an essay contest relating to violence; reviewed a gun control resolution; and reviewed a resolution prepared by the Task Force on Violence and Alternatives to Violence of the Assembly of District Branches.

Following discussion of the work of the task force, the problems it had faced in its efforts, and possible future action, the Council unanimously passed the following recommendation:

> For their outstanding efforts on behalf of the Association during a most difficult and troublesome time in its history and in that of our country, the Council commends their outstanding and important efforts. In recommending now the discharge of the task force, the Council requests that the President of the Association express in writing to each member of the task force, and particularly to its chairman, the gratitude of the officers and members of the Association for their efforts.

Prior to taking this action, the Council recommended that the task force present a proposal for continuing work in the important new area they have recently been examining—third-party intervention in community affairs. The council received that proposal and recommended the following to the Reference Committee:

> The APA Council on National Affairs recommends the establishment of a Task Force on Third-Party Intervention in Community Crises for the purpose of exploring, over a period of one year, the feasibility of involving members of the Association in this effort. It is hoped that the task force will contact organizations nationally recognized for their work in this area and offer assistance and collaboration on behalf of APA, while at the same time contacting potentially interested APA members in local communities threatened with violence. It is further recommended that at the end of the exploratory year the task force submit a report to the Council on National Affairs in regard to the prospects for further fruitful work in this area.

Both the Reference Committee and the Board of Trustees approved these recommendations.

The *Task Force on Indian Affairs*, Morton Beiser, M.D., chairman, developed a contract request with the Indian Health Service entitled "A Survey of Service Network and Utilization Patterns of Mental Health Programs in the Indian Health Service." The contract was approved with a budget of $24,939. Another contract, with a similar function and with funding of $5,000. was negotiated with the State of Maine, and the contract funding has been paid to APA. Members of the task force examined the utilization of community mental health centers in California, the Pacific Northwest, and Montana and developed training programs for Indian mental health personnel. They also engaged in discussions with Canadian colleagues regarding Indian mental health services in British Columbia. The task force had a special meeting with Dr. Emory Johnson, Director of Indian Health Services, on October 13, 1972.

The *Task Force on Environment and Mental Health*, Aristide H. Esser, M.D., chairman, was urged to define its objectives more specifically. The members contemplated meeting in February 1973 to complete their work. They presented a position statement regarding their past work in writing papers on environment and mental health, preparing a bibliography in this area, and participating in a workshop at the 1972 annual meeting. The task force proposed its own dissolution in May 1973, with establishment of new task forces on: 1) ecopsychiatric data base, 2) criteria and methodology for assessing the quality of life, and 3) environmental impact statements. The Council referred to this task force a letter from the Medical Director written to obtain its opinion about whether the proposed new task forces on the effects of unplanned population growth and family planning fall within their purview.

The *Task Force on Delivery of Psychiatric Services in Poverty Areas* made three recommendations: 1) that its leadership through the cochairmen, Orlando B. Lightfoot, M.D., and Quentin Rae-Grant, M.D., be continued; 2) that APA continue to exert maximum influence to avoid a decrease in funding for community mental health centers, particularly in poverty areas; and 3) that it be granted permission to meet and to prepare its report. The Council approved the recommendations, as did the Reference Committee and the Board of Trustees.

The *Committee of Black Psychiatrists*, J. Alfred Cannon, M.D., chairman, met with mental health professionals from a number of NIMH divisions and sections. In this meeting the following topics were discussed: the relationship of the APA Office of Minority Affairs and the Minority Center of NIMH; the Administration's decision to reduce the quota system with regard to the hiring of members of minority groups; the effect of reduction in the training funds for psychiatrists in general and, specifically, the effects on the training of black psychiatrists; and the issue of prison reform. The committee agreed that special efforts be made to institute reform in the correctional institutions for preadolescents and adolescents. The committee urged that APA speak out on the origins of criminal behavior in broken families and on judicial and penal reform. Regarding judicial and penal reform it was believed that the emphasis should shift from intervention after imprisonment to intervention, prevention, and rehabilitation, as well as the use and misuse of psychiatric diagnosis, in parole and sentencing.

The committee concerned itself with the psychological implications of black "exploitation films." Recent statistics, which seemed to show an increased number of blacks with serious psychiatric illnesses, stimulated the committee to recommend that APA urge organization of more community-based treatment facilities and curriculum changes in psychiatric training whereby all practitioners would become acquainted with the particular cultural nuances of blacks and other minorities and their application as far as diagnosis is concerned. The committee noted the structure of various research programs concerned with minority populations and propounded a philosophy of approach in order to further studies of this kind in the future.

The Council reviewed the committee's report and is seeking operational recommendations.

The *Task Force on Mental Health of Spanish-Speaking People in the United States*, Angel G. Gomez, M.D., chairman, will continue efforts to develop information in the area of its concern. Statistics show there are currently 16 million Spanish-Americans within the continental United States and 28 million in Puerto Rico. The United States has the fifth largest Spanish-speaking population in the world. In 1970–1971 no one in psychiatric residency training was a Mexican-American. The task force suggested to the Council a series of mechanisms to deal with various actions concerned with the well-being of the Spanish-speaking population. The Council noted these at its last meeting and advised the task force to take steps to prepare contract or grant proposals to assist in efforts to collect necessary data.

The *Task Force on Comprehensive Health Planning*, Robert L. Williams, M.D., chairman, recommended that "the administration of APA become actively involved in making recommendation for changes in the law relating to comprehensive health planning and the regulations related thereto." The Council approved this recommendation, as did the Reference Committee and the Board of Trustees.

Specifically, the task force has leaned toward the opinion that APA should take a stand on merging mental health planning with comprehensive health planning and eliminating the separate funding category for mental health. The Council has not debated this point of view. It noted, however, the evidence obtained from the task force's work of a lack of involvement and information at the state levels of APA.

The Council recommended, in response to the request of APA President Perry C. Talkington, M.D., that all district branches be requested to discuss involvement in comprehensive health planning actions within their states and the merits and demerits of fusing the planning and funding of mental health with comprehensive health planning.

The Council on Emerging Issues

EDWARD T. AUER, M.D., CHAIRMAN

THE COUNCIL SPENT CONSIDERABLE TIME discussing some of the operational concepts members had about it. Strong sentiment was expressed that the Council should limit its deliberations and considerations to areas in which it felt it could speak from the role of the psychiatrist as a professional person. Some interest was expressed in the attempt to define this role.

It was indicated that the Falk Fellows and residents have an active concern about role definition. The thought was expressed that some steps have been taken toward the clarification of the confusion involved when psychiatric units attempt both to provide professional services to patients and to perform a public health service at the same time. A possible emerging issue was identified as the need for some clarification of the professional role or roles of the psychiatrist in the 1970s.

The concept of the Council operating as a "dew line" for emerging issues for APA was discussed. Most members accepted this concept as one they would like to work with. The need to establish effective communication with "sensing points" (e.g., the Central Office, district branches, etc.) was discussed, as was the need to respond to matters brought to the Council's

attention by conference calls, interim meetings, etc.

The *Task Force on Women*, Nancy A. Roeske, M.D., chairwoman, was appointed recently. Dr. Perry Ottenberg will act as liaison representative from the Council. The task force held its first meeting on November 11, 1972, in Philadelphia. In preparation for this meeting it developed a bibliography of current relevant articles and had obtained and was reviewing a survey conducted by the Task Force on Women of the American Psychological Association. The task force requested time for a panel discussion to be held at the 1973 annual meeting.

The Council discussed at some length the question of how it should respond to the problems of increased use of psychosurgical techniques. The members had all reviewed the statements by Dr. Peter Breggin, which were read into the *Congressional Record* this year. The Council felt that there are currently five areas relative to this issue that required attention:

1. The need for a more objective review of the literature than is currently available. Dr. Auer and Dr. Malitz were to explore the mechanism for accomplishing this.

2. The Council was told by Dr. Barton that the Mississippi District Branch had developed guidelines for evaluating patients considered for lobotomy. These guidelines will be obtained and reviewed and then circulated to other district branches for their information, along with a request that they react to them. Based on these responses, the Council will prepare a report for the Executive Committee of the Board of Trustees. It was hoped that this could be reported to the membership at the 1973 annual meeting.

3. The Council was cognizant of the political aspects of the problem of lobotomy and believed that they could be considered in conjunction with Dr. Waggoner's Ad Hoc Committee on the Use of Psychiatric Institutions for the Commitment of Political Prisoners.

4. The Council saw some relevance of this problem to the general question of organized opposition to scientific change and wondered if any task force or committee was currently addressing itself to this general problem.

5. The Council expressed the belief that APA task forces and committees concerned with peer review, quality of care, and prisons or corrections should be reminded of the possibility of increased use of psychosurgical procedures; their reactions to these procedures might require some special attention.

The Council reviewed correspondence from Dr. Robert Cancro and Dr. Eugene Brody, both of whom are interested in the general area of family planning. Dr. Auer had a long discussion with Dr. Cancro about his interest and then sent a fairly detailed letter to the Council that, in essence, requests the appointment of a task force to do a feasibility study of the possibility of developing conceptual and mathematical models that would simulate the results of unplanned population growth. Dr. Brody met with the Council and indicated his interest in the appointment of a task force to plan and seek outside funding for a conference that would deal with the various psychosocial and psychocultural barriers to family planning. He envisioned this as an interdisciplinary conference and hoped it would help clarify the need for psychiatric involvement in family planning.

The Council unanimously supported the appointment of a Task Force on Psychiatric Involvement in Family Planning. It was hoped that Dr. Brody would accept the chairmanship and that Dr. Cancro would accept membership. The charge of this task force would be to plan and to conduct a conference on the psychosocial and psychocultural aspects of family planning. It was understood that such a conference would require funding from sources other than APA.

The Council reviewed correspondence to Dr. Barton from Walter J. McNerney, president of the Blue Cross Association, requesting that the APA endorse the Blue Cross position regarding no-fault automobile insurance. The Council recommended that this position taken by Blue Cross be forwarded to district branches for their information and appropriate action at the state level. It was suggested that this might be an issue that could be used for improving the relationships between the Blue Cross and APA district branches. It was hoped that the district branches would communicate with the Council over issues that evolved as a result of such action.

The Council discussed the request that APA take an official position and action regarding gun control legislation. Dr. Talkington and Dr. Ameen informed the Council that the Assembly of District Branches had passed a resolution on gun control (see March 1973 issue of the *Journal*). The Council was not aware of the current status of that resolution. Since the Council understood that the resolution suggests a position, it believed that its current status should be reviewed by either the Reference Committee or Executive Committee at their next meeting.

The Council reviewed correspondence from Dr. Alfred Fireman requesting the establishment of a Task Force to Study the Psychiatric Consequences of Increased Free Time in the American Society. The Council declined to take action on this proposal and generally questioned whether leisure time was not more appropriately the concern of other professions. It was noted that the only persons Dr. Fireman suggested as task force members were from the disciplines of sociology and corrective therapy. Some consideration was given to the possibility of a study of the way in which psychiatrists spend their leisure time and even to the possibility of correlating such data with the multiphasic screening of members on a voluntary basis at an annual meeting. This consideration was tabled.

The question of APA participating in active planning for the return of prisoners of war (POWs) was discussed. The Council took the following action: 1) Dr. Auer was to make contact with the Department of Defense research team involved in this and find out what, if any, association they desire; and 2) Dr. Ameen was to bring this question to the attention of the Assembly of District Branches at its meeting in November.

The importance of having counseling available to families of returning POWs was discussed. The anticipation of problems generated by the POW's dreams about his family and home, their dreams about him, the pressures by the media and other social and cultural factors that make it difficult for real feelings to be expressed (e.g., the taboos against mental disruption even when it was already in process before the man became a POW)—all should be considered by those who might be involved in providing assistance or consultation to these men and their families. Questions evolved regarding the special problems of the Viet Nam veteran. Copies of a recent report on this topic were to be reviewed by the Council.

Dr. Stanley Dean visited briefly with the Council, requesting the establishment of a Task Force on Psychiatry and Psychic Phenomena. The Council did not wish to support the appointment of such a task force.

The Council reviewed the recommendations of the *Task Force of Residents* that residents be appointed to all task forces, committees, commissions, and boards, as well as councils. The Council endorsed the concept of residents who are members of APA being appointed as recommended. Two residents are currently assigned to the Council, and one resident was invited to join the Task Force on Women. The Council informed the Task Force of Residents about these assignments.

In the future the Council hoped to consider the delineation of the psychiatrist's role, the impact of the mass media on behavior, and random and street violence.

The Council on International Affairs

HOWARD P. ROME, CHAIRMAN

DR. NORMAN ROSENZWEIG presented the report of the Council on International Affairs for Dr. Rome, who was unable to be present.

The continuing activities of the *Inter-American Council of Psychiatric Associations*, a group representative of psychiatry in the Americas, was reviewed by the Council. The plans for a Second Inter-American Congress on the Mental Health of Children and Youth, which was to be held in Puerto Rico, September 28–October 3, 1972, were highlighted.

The format of the congress was reviewed in detail, including the innovation of its two-part program: 1) the Working Conference—concerned with the collation of the mutual committees' reports on four topical areas, and 2) the Institute—composed of invited participants who would not have previously participated in the preparation of data but who would have had the opportunity under the aegis of the Preparatory Commission to discuss the items developed at the plenary session of the institute.

The next meeting of the Inter-American Council was planned for Mexico City, January 4–5, 1973. The scientific session, which is a regular part of the meeting, was to have as its theme "Inter-American Cooperative Studies of Drug Abuse Prevention," arranged by Dr. Guido Belsasso.

It was anticipated that the new constitution would have been ratified by all of the signatory associations and would provide a smoother organizational procedure.

A proposal to the Council by Dr. Norman Rosenzweig had to do with the establishment of an International Liaison Task Force. Its purpose would be to create a more formal network of members in APA to facilitate an interchange of mental health information.

Dr. Rosenzweig was delegated to contact the district branches to learn who from their membership might be interested in this communications activity.

Jorge Velasco-Alzaga described at length his plan for the establishment of the Instituto Mexicano de Hygiene Mental. He offered its housing facilities on a permanent basis to the Secretariat of the Inter-American Council of Psychiatric Associations.

Among other activities, the Instituto was planning to be an international exchange center for teaching, research, and limited outpatient services. Its physical plant was anticipated to cost $1 million. It would provide a locus for university fellows, World Health Organization personnel interested in epidemiological studies, public health nursing, etc.

Summary reports on the status of the Council's *Task Force in Liaison with the Canadian Psychiatric Association* and *Task Force on Crisis Intervention* were presented.

The *Task Force on the Joint Meeting in Australia, 1975*, Alfred Auerback, M.D., chairman, did not meet during the October meetings but reported that its plans were proceeding well.

The Mexican Center for the Study of Drug Abuse has been established for transcultural research and exchange of information in the area of drug abuse. Two meetings have been held between U.S. and Mexican representatives, with Dr. Rome participating.

The *Task Force on Transcultural Psychiatry*, Ramon Parres, M.D., chairman, and the *Task Force on Psychiatry and Foreign Affairs*, William D. Davidson, M.D., chairman, reported that they continue to plan and participate in scientific symposia, panels, and the 1973 APA annual meeting. The Task Force on Transcultural Psychiatry invited Falk Fellows to attend the World Congress of Psychiatry with local funding and participated in a joint U.S.-Mexican drug abuse exchange. The Task Force on Psychiatry and Foreign Affairs was planning a seminar on federal policy-making processes at the Brookings Institution in Washington, D.C., and a special session on the India-Pakistan question for the 1973 annual meeting, and contributed to the Pugwash Science Conference.

The Council on Professions and Associations

ROBERT S. GARBER, M.D., CHAIRMAN

APA's PRESIDENT, Dr. Perry Talkington, asked the Council on Professions and Associations to introduce a discussion of topics with high priority that could be assigned to the district branches for the development of position statements. The 12 topics follow:

- Expansion of continuing education for psychiatrists. It was pointed out that there needs to be an expansion by way of conducting examinations on the content of *The American Journal of Psychiatry, Psychiatric News*, and *Hospital & Community Psychiatry*. There also needs to be an expansion in the teaching sessions at APA annual meetings.
- Focus on ambulatory care, particularly the emergency room crisis.
- Including within the emerging health maintenance organization (HMO) concept the provision of psychiatric services.
- Stimulating attendance at local scientific meetings.
- The deteriorating quality of urban life.
- The continuing problem of interprofessional relationships, which should include a redefinition of the functions of the psychiatrist.
- The role of the psychiatrist vis-à-vis the newly emerging mental health workers.
- Definition of the psychiatric team. Is it a myth?
- The psychiatrist in private practice as a model for training.
- The current denigration of hospital care.

- The increased tolerance of deviant professional behavior.
- The social attitude toward psychiatric illness.

The *Task Force on Interprofessional Relations*, William W. Zeller, M.D., chairman, submitted a position statement on "The Psychiatrist: Relationships with Nonmedical Mental Health Professions." The revised and edited document was turned over to Dr. Hammersley for duplication so it could be submitted to the Reference Committee for its approval. The statement contained input from the Assembly of District Branches, as well as from APA's legal counsel, Mr. Warren McGee, in regard to the legality of certain statements. The Council unanimously concurred in the recommendation that this statement be approved by the Reference Committee. (See March 1973 issue of the *Journal* for the position statement.)

The *Task Force on Confidentiality as It Relates to Third Parties*, Maurice Grossman, M.D., chairman, offered a report on insurance. It proposed six categories of conditions that would replace the official nomenclature and statements of disability. These statements were edited, and the revised form was being submitted, along with the memorandum indicating the task force's recommendation that the statements be distributed to the district branches and to all interested parties in the Health Insurance Council. The Council recommended this procedure.

The task force was concerned with the problem of the all-inclusive release form signed by patients as part of their insurance contract negotiations. The task force expressed the hope that AMA might consider retracting its approval of the form unless the release of information is limited and conditional. Further, it was recommended that APA not approve any psychiatric or other medical form that contains such a blanket release of information to be signed by the patient. The Council concurred in this recommendation.

Whereas privilege and confidentiality were once considered inseparable, the task force realized that all of the reviewed statements only dealt with privilege and recommended that the Committee on Psychiatry and the Law and those others which appropriately deal with seeking improvement of the proposed Federal Code of Evidence try to get the additional protection regarding confidentiality into the Federal Code. The task force was hoping to modify a code of Public Law 92-255 in order to limit the information that would be released under the Patient Litigant Exception to Privilege, which would require judges to rule out many factors before releasing information about patients to the courts. The Council decided that this matter should be referred to the Committee on Psychiatry and the Law for its support and collaboration.

The task force submitted 18 recommendations at the fall committee meetings in October 1971 that would implement the principles and problems set forth in a position statement on privilege and confidentiality. It received no feedback from any source. It has edited and rewritten the position statement "Principles Governing Confidentiality and Disclosures to Third Parties." Since this had yet to be reviewed for the Council, the matter was to be carried over to its next meeting. The Council would then be able to determine whether the statement is ready for referral to the district branches.

The *Task Force on the Right to Treatment*, Bernard Diamond, M.D., chairman, expressed the belief that the right to treatment is and has been the most critical issue in American psychiatry and unanimously endorsed Judge Johnson's recent conclusion that "to deprive any citizen of his or her liberty upon the altruistic theory that the confinement is for humane therapeutic reasons and then fail to provide adequate treatment violates the very fundamentals of due process." The task force felt strongly that APA should recognize the need to add its authority to the common cause of those who, like Judge Johnson, have brought public, legal, and governmental attention to the degrading, demeaning, and antitherapeutic conditions that exist in some facilities for the mentally ill and the mentally retarded. It recommended that APA set its own minimal adequate standards for institutions and that it file an amicus curiae brief in the case of *Wyatt v. Stickney*. Further, it urged that APA offer its complete cooperation to Judge Johnson in any further hearings or consultations. The Council concurred with these recommendations.

The *Committee on Psychiatry and the Law*, Herbert E. Thomas, M.D., chairman, requested the privilege of appearing before the November meeting of the Assembly of District Branches in order to discuss the position statement on involuntary hospitalization (see March 1973 issue of the *Journal*). It wished to briefly state the changes proposed in accordance with recommendations of the committee from the Assembly of District Branches. Dr. Thomas hoped that he could head off any further move to completely redo this paper since it has been in the committee's hands for over three years; he said he believed any further procrastination would be a disservice to everyone concerned. The Council concurred in this request.

The committee had a lengthy discussion with Mr. Milton G. Rector of the National Council on Crime and Delinquency. It learned that the federal and state governments are about to proceed with an immense building program for correctional facilities. This, the committee felt, represents a waste of money at a time when the main professional effort has been to find alternatives to institutions. It was decided that efforts would be made during the next few months to formulate a statement that might be useful to the Council either as a position statement on or as a preamble to what might become a serious effort to review the role of the psychiatrist in the criminal justice process. The Council concurred and recommended that the committee be encouraged to pursue this interest in collaboration with any other APA committee that was interested.

The committee also met with Robert L. Sadoff, M.D., president of the American Academy of Psychiatry and the Law and a member of APA, in order to collaborate on plans made for a joint meeting in Atlanta, March 15–17, 1973. It was noted that Dr. Howard Rome would lend the additional support of the AMA Council on Mental Health.

Two items not covered at their meeting will be reviewed later by the committee members. These were the problem of diagnosis by mail and a request by Dr. Raymond W. Waggoner that the committee consider the matter of involuntary hospitalization in terms of certain problems that his ad hoc committee is currently attempting to work with.

Dr. Thomas reported that, since the fall meeting terminated his chairmanship, he was anxious to see that the work of the committee continues without interruption. For example, one consultant has said that there are at least five areas in the American Bar Association where participation by APA would be most welcome. The Council, in recognition of the fact that Dr. Thomas has fulfilled two terms, requested concurrence of the Reference Committee in supporting the recommendation that Dr. Thomas be considered for continuation in this vital role. The Council, therefore, unanimously recommended that he be seriously considered for another three-year term.

The *Task Force on Religion and Psychiatry*, Abraham Franzblau, M.D., chairman, did not have any recommendations for the Council to act on. However, it has been involved in distributing the "Registry of the Providers of Psychiatric Services" to religious institutions.

The *Committee on Psychiatric Nursing*, Harvey L.P. Res-

nik, M.D., chairman, asked that its name be changed to the "Committee in Liaison with the American Nurses' Association." The Council did not recommend the new name in that the word "liaison" would not attach sufficient significance to the purpose of this committee; furthermore, liaison with the American Nurses' Association (ANA) alone would exclude other nursing organizations.

The committee, having met with Dr. Hammersley, recommended that APA record its disappointment that psychiatry was not represented in the AMA-ANA Joint Practice Committee Report; this report should be ratified as soon as possible. The Council found no fault with this recommendation and relied upon its staff representative, Dr. Hammersley, for his concurrence.

The committee, having been charged by the Council to further justify a consumer committee, related that a consumer committee is needed to inform and advise APA on matters relating to the delivery of psychiatric care as seen by those who receive services. The committee went on to request that the group not exceed 11 members; that its composition should represent parent groups, patient groups, the National Association for Mental Health, the Narcotic Addiction Rehabilitation Commission, Recovery Incorporated, Alcoholics Anonymous, Synanon, Parent-Teacher Associations, the United Auto Workers, the insurance industry, management, and prisoners; and that it should reflect the various sexual, ethnic, and geographic elements of the population. It recommended that a special task force be appointed by APA to study this proposal further. The Council concurred and is prepared to establish such a task force if doing so appears not to fall within the realm of any other council.

Dr. Resnik announced that he would be resigning at the end of the year because of a new job assignment and expressed the hope of the committee that the new chairman be selected from among its membership in order to maintain continuity. The entire issue of the succession of chairmen of committees, councils, and task forces was discussed at length with the following recommendations resulting:

1. The committee recommended that a successor be appointed from its midst, and the Council concurred.

2. The committee recommended that a policy be fixed within APA that replacements for chairmanships of committees, councils, and task forces be filled from nominations within the membership of the same, subject to the discretion of the President. Under circumstances when concurrence was not obtained and it was necessary to introduce others for a chairmanship, this should be accomplished with the concurrence of the Executive Committee. The Council felt that this recommendation lay entirely within the jurisdiction of the President.

The *Committee on Liaison with the American College of Physicians* (ACP), Charles P. Neumann, M.D., chairman, formulated plans for the presentation of two programs—one at the APA annual meeting and one at the ACP annual meeting in 1973. Expenses for the APA annual meeting in Honolulu will be kept to a minimum by utilizing either people from the State of Hawaii or from the west coast. The committee predicted that only the travel expenses and honoraria for two faculty physicians will be necessary. The Council approved the two programs, as well as the expenses necessary to implement them.

The committee also met with the Committee on Psychiatry and Medical Practice to learn of their plans for the 11th Colloquium on the Postgraduate Teaching of Psychiatry. The committee asked to send one observer; the Council recommended approval.

The committee discussed the abolition of the internship and expressed its profound concern that as a consequence psychiatry would lose its identity with medicine.

The *Committee on Psychiatry and Social Work*, Joseph B. Parker, M.D., chairman, recommended that it be disbanded. In its place it recommended that a task force in collaboration with other medical and nonmedical professions be developed. The Council concurred in the recommendation that the committee be discontinued; it will study the recommendation for a replacement.

The *Committee on Rehabilitation*, Nyla J. Cole, M.D., chairwoman, was ambivalent about whether or not it should be continued. In the event that the Council recommends discontinuation, the committee expressed the desire that advocacy for rehabilitation be assumed by some member of the Council. The committee expressed three areas of concern:

1. What goes on in medical school education regarding rehabilitation, and how does one encourage medical schools to include some teaching on rehabilitation in the department of psychiatry?

2. Continued effort should be made to include rehabilitation in the core curriculum.

3. There should be some device to maintain a general commitment to cross education in rehabilitation.

The Council decided to discontinue the committee and will determine later whether there is a need to create a task force for any specific issue.

The Council on Internal Organization

JACK A. WOLFORD, M.D., CHAIRMAN

THE COUNCIL ON INTERNAL ORGANIZATION met October 11–14, 1972, in Washington, D.C. Dr. Alyce C. Gullattee and Dr. Thomas Conklin served as consultants. Dr. James Stevenson, a Falk Fellow, met with the Council; Dr. Karen Preis, the second Falk Fellow, met with the Committee on Program; and Dr. Bernard Fisher, the third Falk Fellow, met with the Committee on Public Information. Dr. Harry A. Brunt and Dr. John R. Saunders represented the Board of Trustees and Dr. Walter E. Barton represented APA staff.

As requested last October, Donald W. Hammersley, M.D., reported on the state of *Hospital & Community Psychiatry* so that a decision might be made regarding offering the journal as a prerequisite of membership. He felt that the editorial staff had broadened the content of the journal but were worried about the shift that might be required to "satisfy" a great many more psychiatrists reading the journal. Dr. Hammersley pointed out

that discussing the question of *H&CP* as a perquisite at this time was largely academic since monies were not available. It therefore appeared that in view of the current economic situation it was best to defer any decision regarding *Hospital & Community Psychiatry*. In general the Council was impressed by the continued improvement of the journal.

Dr. Hammersley reported that the 24th Institute on Hospital & Community Psychiatry, held in St. Louis, Mo., was a success. The next meeting will be at the Americana Hotel in Miami, Fla., September 17–20, 1973. The planning and staff work will be done under the direction of Henry Work, M.D. The Council members extended their thanks to Dr. Hammersley for his work over the years in relation to the Institute on Hospital & Community Psychiatry.

The Council discussed the Task Force of Residents at length with the Council on Medical Education and Career Development and the residents. It expressed willingness to assume responsibility for this task force if desired.

During the meeting, the Council members toured APA headquarters and talked with people in each section. The visit to the offices of the *Journal* resulted in an informative discussion with Dr. Francis J. Braceland. While the Council members were impressed, their ignorance of the "internal organizations" was disturbing. They requested Dr. Barton and the staff to conduct a day-long session regarding the matters of APA about which they should be knowledgeable and concerned. This was particularly important in light of our auditors' report recommending that a year's study be given to: 1) the computerization of fiscal records into a single accounting system, and 2) the appointment of a Deputy for Business Affairs or Management to parallel the duties of the current Deputy Medical Director.

Hayden H. Donahue, M.D., chairman, *Committee on Grants and Awards*, talked with the Council about the various awards and honorary lectures. The committee recommended changes in the Operations Manual and is investigating a new award.

The *Committee on Conventions*, Alexander Simon, M.D., chairman, made recommendations for the 1973 annual meeting in Hawaii. The Council commended the committee members for their excellent work.

The *Committee on Program*, Melvin Sabshin, M.D., chairman, brought the Council up to date. As usual, this committee has planned an excellent program for the 1973 annual meeting, and the Council commended its members for their work.

Dr. Sabshin also pointed out that the AMA currently has an APA "Representative for Program" in its Psychiatry Section, the representative being Dr. H. Keith H. Brodie. The Council urged that the committee make a recommendation to continue this position when Dr. Brodie's term expires.

The *Task Force on Arrangements*, George Schnack, M.D., chairman, reported that it was working on arrangements for the 1973 annual meeting.

The *Committee on Member Insurance and Retirement Plans*, Chester Trent, M.D., chairman, was congratulated for its long and tireless effort to develop a new physicians' liability policy, which is now in effect. In keeping with this a recommendation was made to the APA President that he appoint a Loss Control Committee.

The Council accepted the recommendation of the committee that it does not appear to be necessary to survey the 780 members who have had liability experience.

The APA retirement plans were a topic of discussion, and the duties of the Trustees of the APA Retirement Plan were reviewed. The Council recommended that various recommendations of the committee concerning safeguards be implemented, including one stating that all changes in the by-laws requested by the administrator of the plan should be independently reviewed by the Association's attorney and the medical director before being presented to the Committee on Insurance or the Executive Committee. The independent review of the performance of the plan by the consultant to the Committee on Insurance was lauded.

The responsibilities of the Trustees of the APA Retirement Plan seemed sound, and the Council urged acceptance. In essence they are designed for the ongoing evaluation of performance in conjunction with the consultant to the committee and with the APA treasurer. Further, it was requested that Mr. Murray W. Latimer's report, in a form interpreted by the chairman of the committee, be made available to participating members and to any potential new members. It was also recommended that the annual report be furnished to the participating members. The Council also concurred in the recommendation concerning an adequate annual audit. An assessment of the marketing activities and their adequacy as carried out by the administrator was considered to be a sound recommendation.

The committee would like to search out a "broker of record" to reevaluate APA insurance programs, and the Council concurred with this plan.

The *Committee on Public Information*, Zigmond M. Lebensohn, M.D., chairman, has selected a winner of the Robert T. Morse Writer's Award. The winner will be announced at the Convocation of the 1973 annual meeting. The committee was considering the possibility of a public attitude survey concerning psychiatry. Further study is needed, with a review of the literature, design study, and consultation with the Council on Research and Development.

The committee recommended that no further statements by APA regarding positions of great responsibility in our society and mental illness are indicated at this time.

The *Psychiatric Glossary* was reviewed; it was recommended that it be retained in its present form for now. APA sponsorship of an educational film series is being considered by the committee.

The *McGavin Award Selection Board*, Marshall D. Schechter, M.D., chairman, announced that it will have a selection for an award at the annual meeting.

The *Vestermark Prize Board*, William Malamud, M.D., chairman, met and selected a recipient for this award, which will be announced at the Convocation.

The *Isaac Ray Award Board*, Donald H. Russell, M.D., chairman, reported that it was selecting a recipient for this award. The board was in the process of looking for more money. The Council expressed the hope that the entire association would back this outstanding award honoring one of APA's founders and that support money could be found.

The *Manfred S. Guttmacher Award Board*, Jonas R. Rappeport, M.D., chairman, and the *Hofheimer Prize Board*, Robert A. Cohen M.D., chairman, were in the process of selecting recipients. The winners will be announced at the Convocation of the 1973 annual meeting.

The *House Committee*, Marvin Adland, M.D., chairman, reported that all is well with APA property.

The last report was from one of the Falk Fellows, James M. Stevenson, M.D., which the Council accepted with thanks. Dr. Stevenson was a participant throughout the meeting, and from his report appeared to have developed greater insight into the organization and its complexities and functions. He supported the Falk Fellow program and its objectives. The Council was pleased that he saw its members as being egalitarian in their reception of him. Dr. Stevenson strongly supported resident participation at all levels of APA.

The Council has been planning a meeting in Washington,

D.C., March 30–31, to study the APA's organization and function and other matters concerning future needs.

The Council thanked APA staff, and particularly Dr. Walter Barton, for their tireless devotion.

The Assembly of District Branches

Committee on Divisional Meetings. One of the most successful APA divisional meetings was held in San Diego, Calif., October 5–8, 1972. Concerned with the theme "Psychiatrists and the Future," the program was planned in order to involve practicing psychiatrists, as well as those in training. The meeting was well attended and drew a great deal of approbation. In October 1973, Area III will hold a divisional meeting in Williamsburg, Va. This meeting will coincide with the centennial of Eastern State Hospital, located in that city, and is planned to be a fitting commemorative.

The *Commission on Future Planning of the Assembly*, which is currently the Assembly's most active committee, is concerned with all matters related to the overall organization of the Assembly, as well as with considering procedures for making it a more effective body. During the past year, it has considered the effect the 1973 annual meeting in Hawaii will have on the Assembly and has made plans to take further advantage of this setting.

The commission has restudied the matter of Canadian members and has suggested a renewed APA-CPA committee. Currently, the commission has no recommendations for a new class of membership.

The commission has also been active in urging the area councils to develop mechanisms for handling resolutions; much of this has been effected. Recently it proposed that members of the Assembly be appointed to APA councils. The Reference Committee considered and has approved this concept in principle. It has also been planned that members of the Executive Committee of the Assembly be appointed as liaison members of the APA councils. Through the commission's efforts, material coming from the Reference Committee and the Board of Trustees has been sent to the Assembly for consideration before final approval.

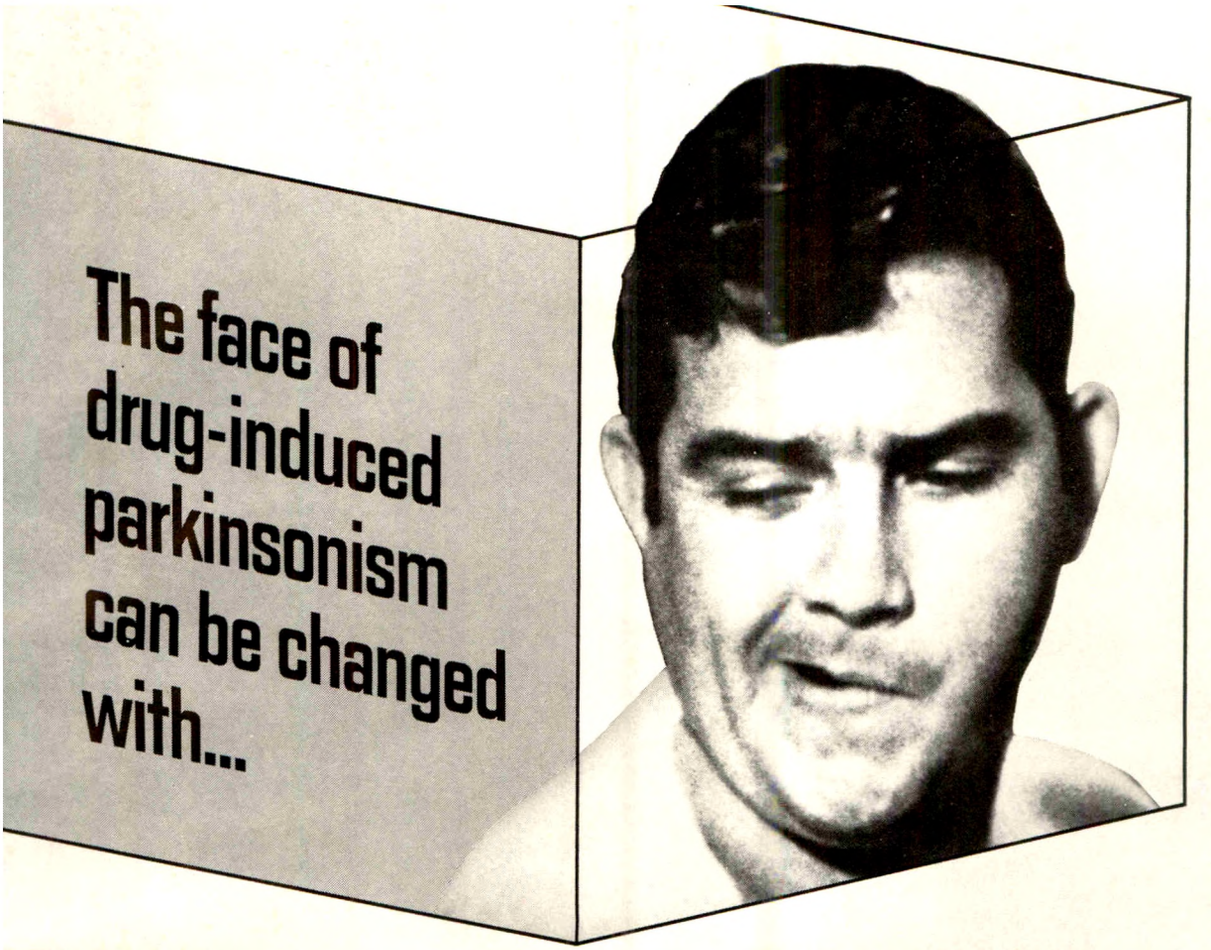
The *Committee on Liaison Between the Assembly and NIMH* has met periodically with representatives from the Division of Mental Health Services of NIMH. In addition it has urged that area councils begin to assume greater responsibilities in evaluating mental health programs in their respective regions.

Many district branches have been sending their newsletters to the regional office in their area, and the committee has assisted in distributing "News from NIMH" to all district branches. The committee is responsible for planning part of the Assembly fall program, and in 1972 it once again had Dr. Bertrand Brown and his staff present to discuss NIMH activities.

The district branches have been involved in major recruitment efforts to induce members-in-training to become part of APA; the *Committee on Membership* has actively supported this drive, which is beginning to bear fruit in the number of residents who have applied and been accepted for membership. The committee has been urging the district branches to advance these members as rapidly as possible and to use them in committee functions within the district branches. The committee has also been concerned about the transfer of membership from one district branch to another and is actively working on this problem.

The *Task Force on Delivery of Mental Health Services* has been discussing material related to peer review, national health insurance, and various statements from such groups within APA as the Committee for Concerned Psychiatrists. The task force has commented on many of the reports from committees and councils and has been helpful to the Assembly in organizing its thinking around these major issues.

The *Task Force to Define the Nature, Scope, and/or Areas of Competence of the Specialty of Psychiatry* met for the first time in November 1972. It is charged with defining the identity of psychiatry and with differentiating psychiatry from other disciplines in the mental health field. After reviewing the APA pamphlet "What Is a Psychiatrist?" the task force decided that it was obsolete. At its original meeting the task force defined its role and elaborated questions to be discussed. It has made plans to meet in February 1973 to further its activities and to make plans for the future. The work of the task force ties in with other APA concerns about the specialty of psychiatry and the best way to represent it to the members, to other professions, and to the public.



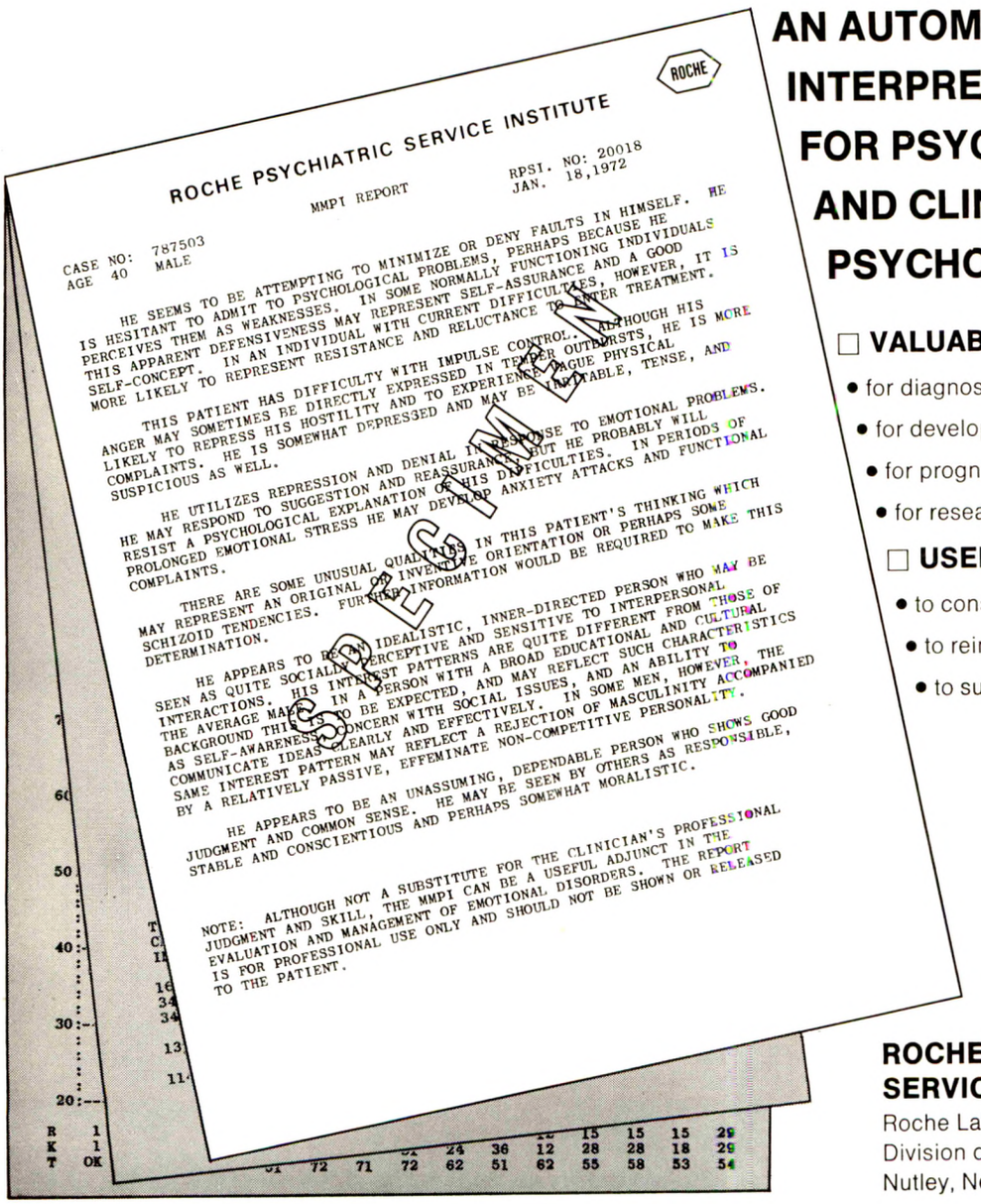
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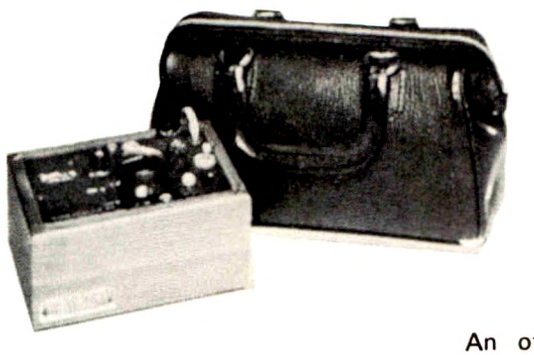
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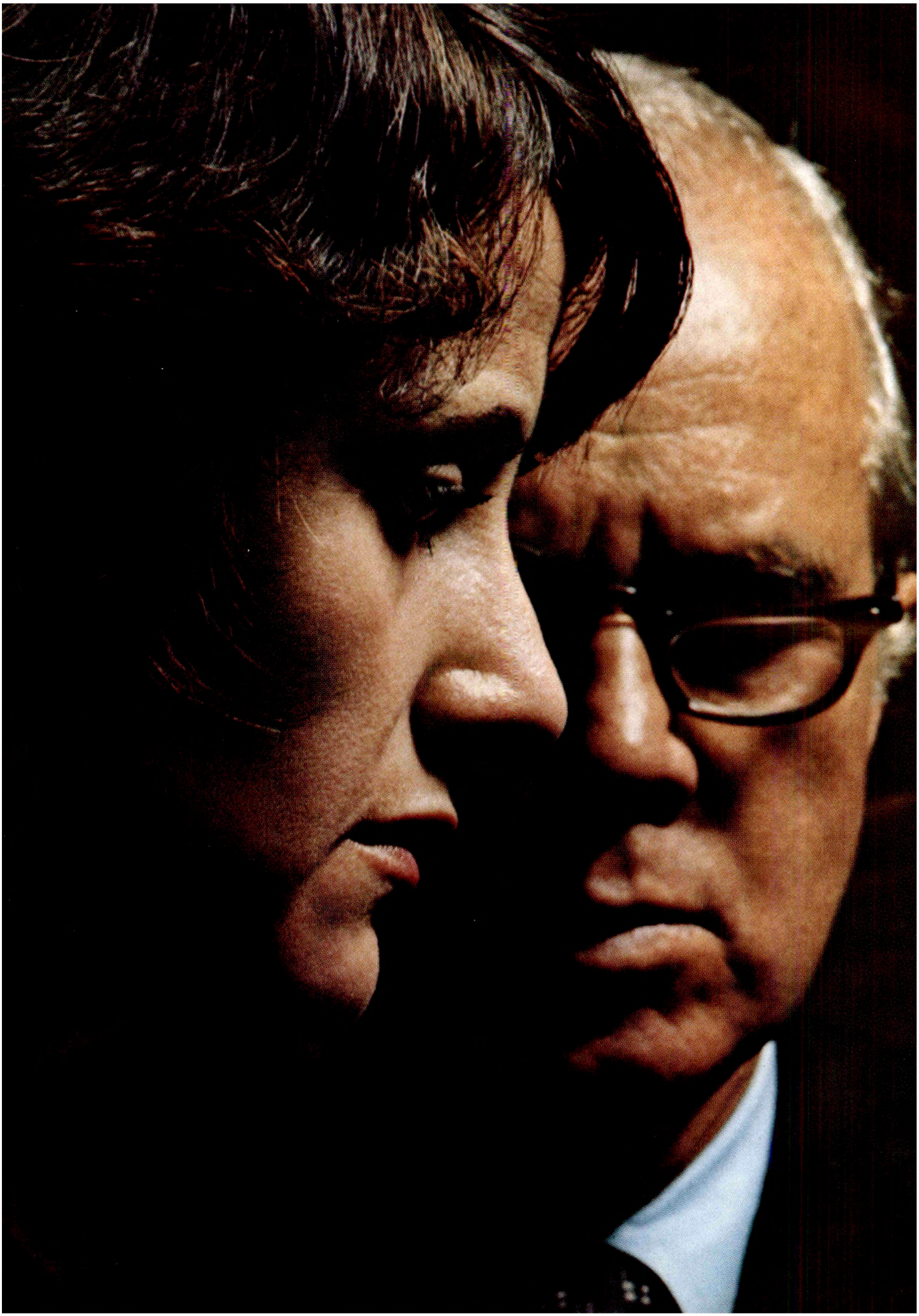
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The TRIAVIL® Potential in the management of moderate to severe anxiety with depression

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There are three important benefits you may expect when TRIAVIL is part of the treatment program: (1) When symptoms of moderate to severe anxiety or agitation with depression are relieved, the patient may become more accessible and cooperative. (2) As somatic manifestations are controlled, attention may be focused on underlying causative factors. (3) Symptomatic relief may enable the patient to function more effectively in his daily life while your work with the patient progresses.

Since it is simpler to remember to take one tablet rather than several (particularly in multiple daily doses), your patients on TRIAVIL will be more likely to take proper doses of the medication. And, of course, economy is an added factor in therapy with TRIAVIL.

Tablets TRIAVIL are available in four different combinations affording flexibility and individualized dosage adjustment. Close supervision of patients is essential until satisfactory remission has taken place. Suicide is inherent in any depressive illness so patients should not have easy access to large quantities of the drug. The drug may impair alertness and potentiate the response to alcohol. It should not be used during the acute recovery phase following myocardial infarction or given to patients who have received an MAOI within two weeks. TRIAVIL should be used with caution in glaucoma and in patients prone to urinary retention. It is contraindicated in CNS depression and in the presence of evidence of bone marrow depression.

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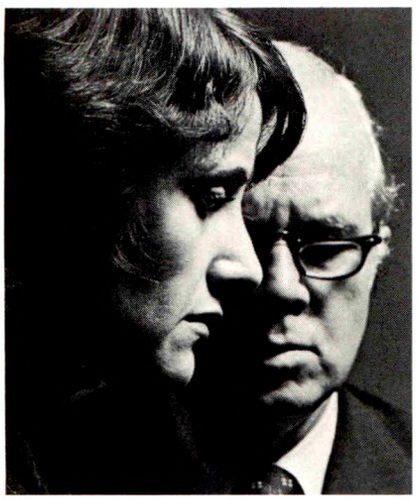
For a brief summary of prescribing information, please turn to the following page.

when patients exhibit moderate to marked anxiety or agitation with symptoms of depression

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an antidepressant tranquilizer

when patients exhibit moderate to marked anxiety
or agitation with symptoms of depression



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CONTRAINDICATIONS: Central nervous system depression from drugs (barbiturates, narcotics, analgesics, antihistamines) and alcohol; bone marrow depression; pregnancy; known hypersensitivity to phenothiazines or amitriptyline. Do not give concomitantly with MAOI drugs because hyperpyretic crises, severe convulsions, and deaths have occurred from such combinations. Allow minimum of 14 days between therapies, then initiate therapy with TRIAVIL cautiously, with gradual increase in dosage until optimum response is achieved. Not recommended for use during acute recovery phase following myocardial infarction. Not recommended in children.

WARNINGS: TRIAVIL should not be given with guanethidine or similarly acting compounds. Use cautiously in patients with history of urinary retention, narrow-angle glaucoma, increased ocular pressure, or convulsive disorders. Patients with cardiovascular disorders should be watched closely. Tricyclic antidepressants, including amitriptyline HCl, particularly in high doses, have been reported to produce arrhythmias, sinus tachycardia, and prolongation of conduction time. Myocardial infarction and stroke have been reported with tricyclic antidepressant drugs. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. Caution patients performing hazardous tasks, such as operating machinery or driving motor vehicles, that drug may impair mental and/or physical abilities.

PRECAUTIONS: Suicide is a possibility in depressed patients and may remain until significant remission occurs. Such patients should not have access to large quantities of this drug.
Perphenazine: Should not be used indiscriminately. Use with caution in patients who have previously exhibited severe adverse reactions to other phenothiazines. Likelihood of untoward actions is greater with high doses. Closely supervise with any dosage.
The antiemetic effect of perphenazine may obscure signs of toxicity due to overdosage of other drugs or make more difficult the diagnosis of disorders such as brain tumor or intestinal obstruction.
A significant, not otherwise explained, rise in body temperature may suggest individual intolerance to perphenazine, in which case discontinue.
If hypotension develops, epinephrine should not be employed, as its action is blocked and partially reversed by perphenazine.
Phenothiazines may potentiate the action of central nervous system depressants (opiates, analgesics, antihistamines, barbiturates, alcohol) and atropine. In concurrent therapy with any of these, TRIAVIL should be given in reduced dosage. May also potentiate the action of heat and phosphorous insecticides.
Amitriptyline: In manic-depressive psychosis, depressed patients may experience a shift toward the manic phase if they are treated with an antidepressant drug. Patients with paranoid symptomatology may have an exaggeration of such symptoms. The tranquilizing effect of TRIAVIL has seemed to reduce the likelihood of this effect.
Supervise closely and carefully adjust dosage when given with anticholinergic agents and sympathomimetic drugs.
The drug may enhance the response to alcohol and the effects of barbiturates and other CNS depressants.
Concurrent administration of amitriptyline HCl and electroshock therapy may increase the hazards of therapy. Such treatment should be limited to patients for whom it is essential.
Discontinue several days before elective surgery if possible.
Elevation and lowering of blood sugar levels have both been reported.

ADVERSE REACTIONS: Similar to those reported with either constituent alone.
Perphenazine: Side effects may be any of those reported with phenothiazine drugs: extrapyramidal symptoms (opisthotonos, oculogyric crises, hyperreflexia, dystonia, akathisia, dyskinesia, parkinsonism) usually controlled by the concomitant use of effective antiparkinsonian drugs and/or by reduction in dosage, but sometimes persist after discontinuation of the phenothiazine; skin disorders (photosensitivity, itching, erythema, urticaria, eczema, up to exfoliative dermatitis); other allergic reactions (asthma, laryngeal edema, angioneurotic edema, anaphylactoid reaction); peripheral edema; reversed epinephrine effect; hyperglycemia; endocrine disturbances (lactation, galac-

orrhea, disturbances of menstrual cycle); altered cerebrospinal luid proteins; paradoxical excitement; ECG abnormalities quinidine-like effect); reactivation of psychotic processes; atatonic-like states; autonomic reactions, such as dryness of he mouth, headache, nausea, vomiting, constipation, obstipaion, urinary frequency, blurred vision, nasal congestion, and a hange in pulse rate; hypnotic effects; pigmentary retinopathy; orneal and lenticular pigmentation; occasional lassitude; muscle weakness; mild insomnia. Other adverse reactions reported with various phenothiazine compounds include blood dyscrasias pancytopenia, thrombocytopenic purpura, leukopenia, agranuocytosis, eosinophilia); liver damage (jaundice, biliary stasis); grand mal convulsions; cerebral edema; polyphagia; photophobia; skin pigmentation; and failure of ejaculation.

Amitriptyline: Note: Listing includes a few reactions not reported for this drug, but which have occurred with other pharmacologically similar tricyclic antidepressant drugs. *Cardiovascular:* Hypotension; hypertension; tachycardia; palpitation; myocardial infarction; arrhythmias; heart block; stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; ncoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus. *Anticholinergic:* Dry mouth; blurred vision; disturbance of accommodation; constipation; paralytic ileus; urinary retention; dilatation of urinary tract. *Allergic:* Skin rash; urticaria; photosensitivity; edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis; eosinophilia; purpura; thrombocytopenia. *Gastrointestinal:* Nausea; epigastric distress; vomiting; anorexia; stomatitis; peculiar taste; diarrhea; parotid swelling; black tongue. *Endocrine:* Testicular swelling and gynecomastia in the male; breast enlargement and galactorrhea in the female; increased or decreased libido; elevated or lowered blood sugar levels. *Other:* Dizziness; weakness; fatigue; headache; weight gain or loss; increased perspiration; urinary frequency; mydriasis; drowsiness; jaundice; alopecia. *Withdrawal Symptoms:* Abrupt cessation after prolonged administration may produce nausea, headache, and malaise. These are not indicative of addiction.

For more detailed information, consult your MSD Representative or see full Prescribing Information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486.

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Addendum

A suggested four-point rating scale to help evaluate patient progress week-to-week or month-to-month when presenting symptoms include anxiety or agitation with depression.

Mood—degree of depression (facial expression, voice quality, conversation content).

1. Continued profound depression, feelings of hopelessness.
2. Feeling "blue," chronic pessimism, rare cheerfulness.
3. Appropriate cheerfulness, slight depression, diluted pleasure capacity.
4. Appropriate cheerfulness and optimism.

Psychomotor Activity—reflective of emotional pressure (hypoactive patient).

1. Immobile, not fulfilling daily responsibilities.
2. Generalized slowness, constant fatigue.
3. Appropriate motor activity in most instances.
4. Act vity appropriate in degree and duration to environmental stimuli.

Performance — vocational.

1. Unable to perform at all.
2. Works intermittently with difficulty.
3. Full-time employment, moderate pride in achievements.
4. Full-time employment, functioning efficiently, deriving pleasure from achievements.

Anxiety Amelioration — in terms of motor, affective, autonomic and verbal phenomenon.

1. Panic, incessant movement, state of terror.
2. Moderate restlessness, pacing, moderate expression of fear.
3. Slight restlessness, slight affective expression of fear.
4. Calm, no restlessness, expression of fear (when it occurs) appropriate to severity of stress.

Amelioration of Symptoms

1. Symptoms unchanged or worse.
2. Fair, slight improvement, patient still plagued with symptoms.
3. Symptoms markedly reduced in intensity and frequency, able to cope.
4. All presenting symptoms gone.

Adapted from Lesse, S.: Anxiety, Its Components, Development and Treatment, Grune & Stratton, New York, 1970.

Help release her from severe anxiety. Then she can open up to you.



Only with relief of the severe anxiety that often blocks verbalization can many patients expect to progress in therapy. To this end, Serax may prove beneficial, for it is now well established as an effective antianxiety adjunct. Serax offers flexibility as well. Dosage can be readily adjusted to individual needs. To the point where the patient may frequently resume normal work activities.

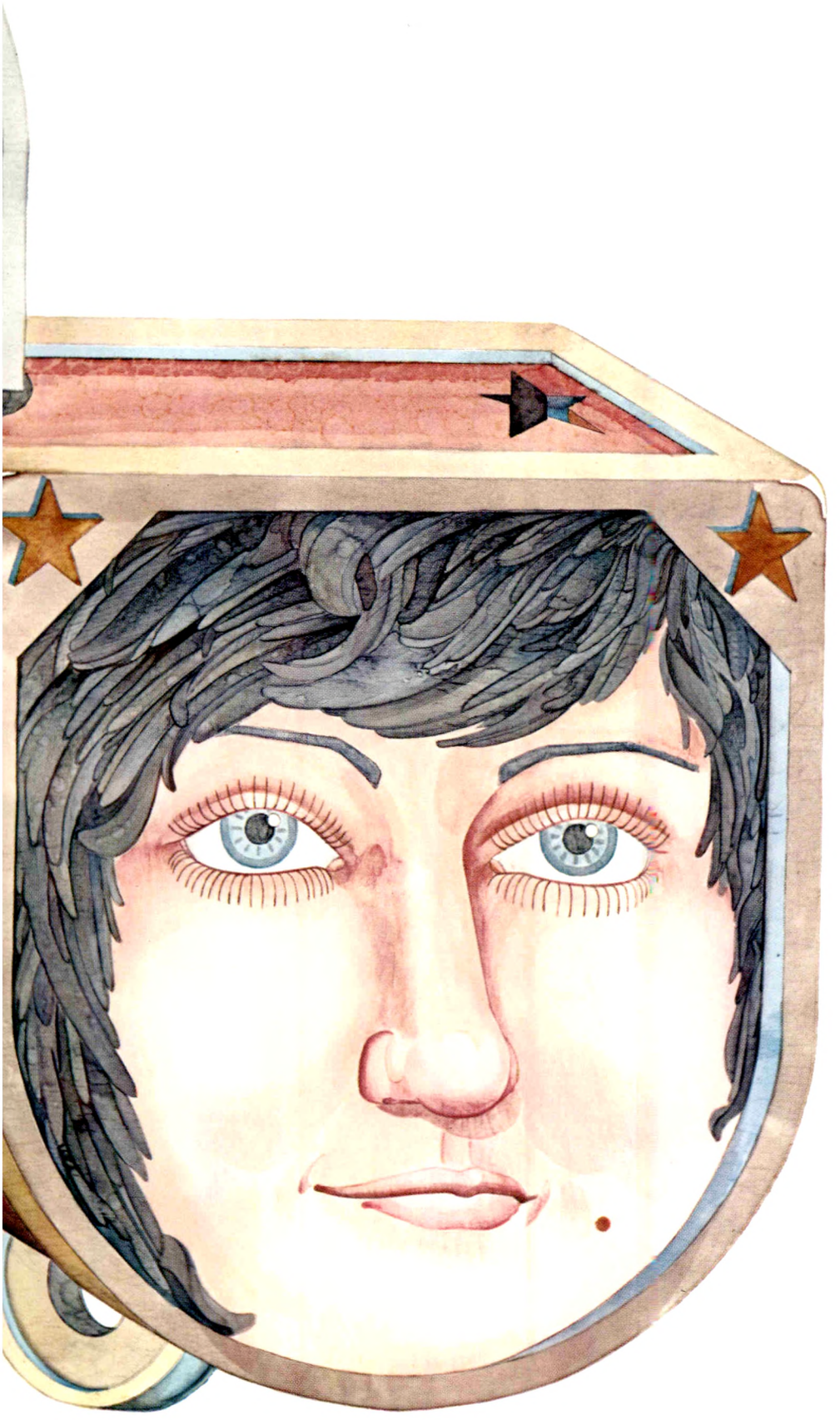
As with other CNS-acting drugs, patients should be cautioned against driving automobiles or operating dangerous machinery until it is known that they do not become drowsy or dizzy on oxazepam therapy. When prescribing, carefully observe dosage recommendations and appropriate precautions, especially as pertaining to the elderly or where a drop in blood pressure might lead to cardiac complications.

In severe anxiety

Serax®
(oxazepam)

Wyeth Laboratories
Philadelphia, Pa. 19101

Please see important information on page after next.



Help release her from severe anxiety.



Indications: Oxazepam is indicated for the management and control of anxiety, tension, agitation, irritability and related symptoms. Such symptoms are commonly seen in patients with a diagnosis of psychoneurotic reaction, psychophysiological reaction, personality disorder, or in patients with underlying organic disease.

Anxiety associated with depression is also responsive to oxazepam therapy.

This product has been found particularly useful in the management of anxiety, tension, agitation and irritability in older patients.

Alcoholics with acute tremulousness, inebriation or with anxiety associated with alcohol withdrawal are responsive to therapy.

Contraindications: History of previous hypersensitivity to oxazepam. Oxazepam is not indicated in psychoses.

Warning: *Use in Pregnancy:* Safety for use in pregnancy not established.

Precautions: Hypotensive reactions are rare, but use with caution where complications could ensue from a fall in blood pressure, especially in the elderly. Withdrawal symptoms upon discontinuation have been noted in some patients exhibiting drug dependence through chronic overdose. Carefully supervise dose and amounts prescribed, especially for patients prone to self-overdose; excessive, prolonged use in susceptible patients (alcoholics, ex-addicts, etc.) may result in dependence or habituation. Reduce dosage gradually after prolonged excessive dosage to avoid possible epileptiform seizures. Withdrawal symptoms following abrupt discontinuance are similar to those seen with barbiturates. Caution patients against driving or operating machinery until absence of drowsiness or dizziness is ascertained. Warn patients of possible reduction in alcohol tolerance.

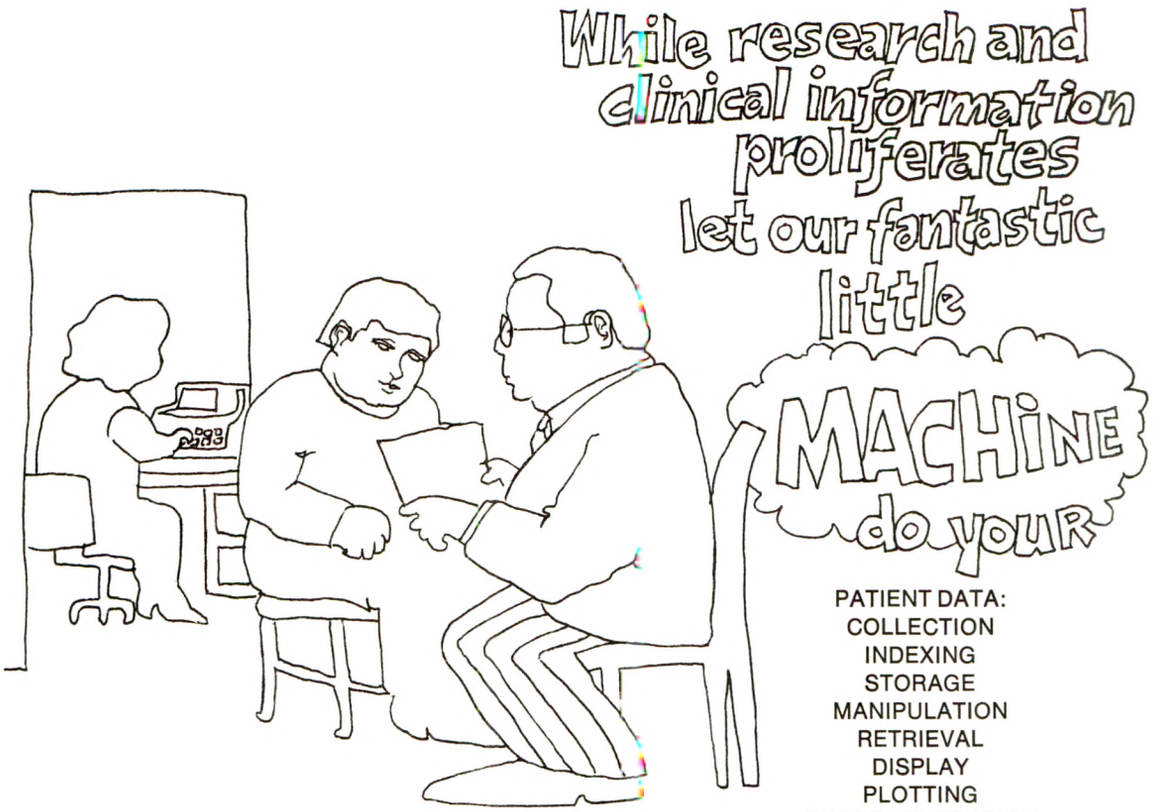
Not indicated in children under 6 years; absolute dosage for 6- to 12-year-olds not established.

Adverse Reactions: Therapy-interrupting side effects are rare. Transient mild drowsiness is common initially; if persistent, reduce dosage. Dizziness, vertigo and headache have also occurred infrequently; syncope, rarely. Mild paradoxical reactions (excitement, stimulation of affect) are reported in psychiatric patients. Minor diffuse rashes (morbilliform, urticarial and maculopapular) are rare. Nausea, lethargy, edema, slurred speech, tremor and altered libido are rare and generally controllable by dosage reduction. Although rare, leukopenia and hepatic dysfunction including jaundice have been reported during therapy. Periodic blood counts and liver function tests are advised. Ataxia, reported rarely, does not appear related to dose or age. These side reactions, noted with related compounds, are not yet reported: paradoxical excitation with severe rage reactions, hallucinations, menstrual irregularities, change in EEG pattern, blood dyscrasias (including agranulocytosis), blurred vision, diplopia, incontinence, stupor, disorientation, fever and euphoria.

Availability: Capsules of 10, 15 and 30 mg. oxazepam; tablets of 15 mg. oxazepam.

Serax®
(oxazepam)

Wyeth Laboratories
Philadelphia, Pa. 19101



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Navane (thiothixene) helps reduce the intensity and frequency of acute psychotic symptoms. With Navane, confusion, disorientation and other manifestations of acute psychosis may be controlled. And, as acute symptomatology decreases, the patient may be better able to readjust to therapeutic, family and community relationships and responsibilities. Navane...an effective anti-psychotic for acute psychosis.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

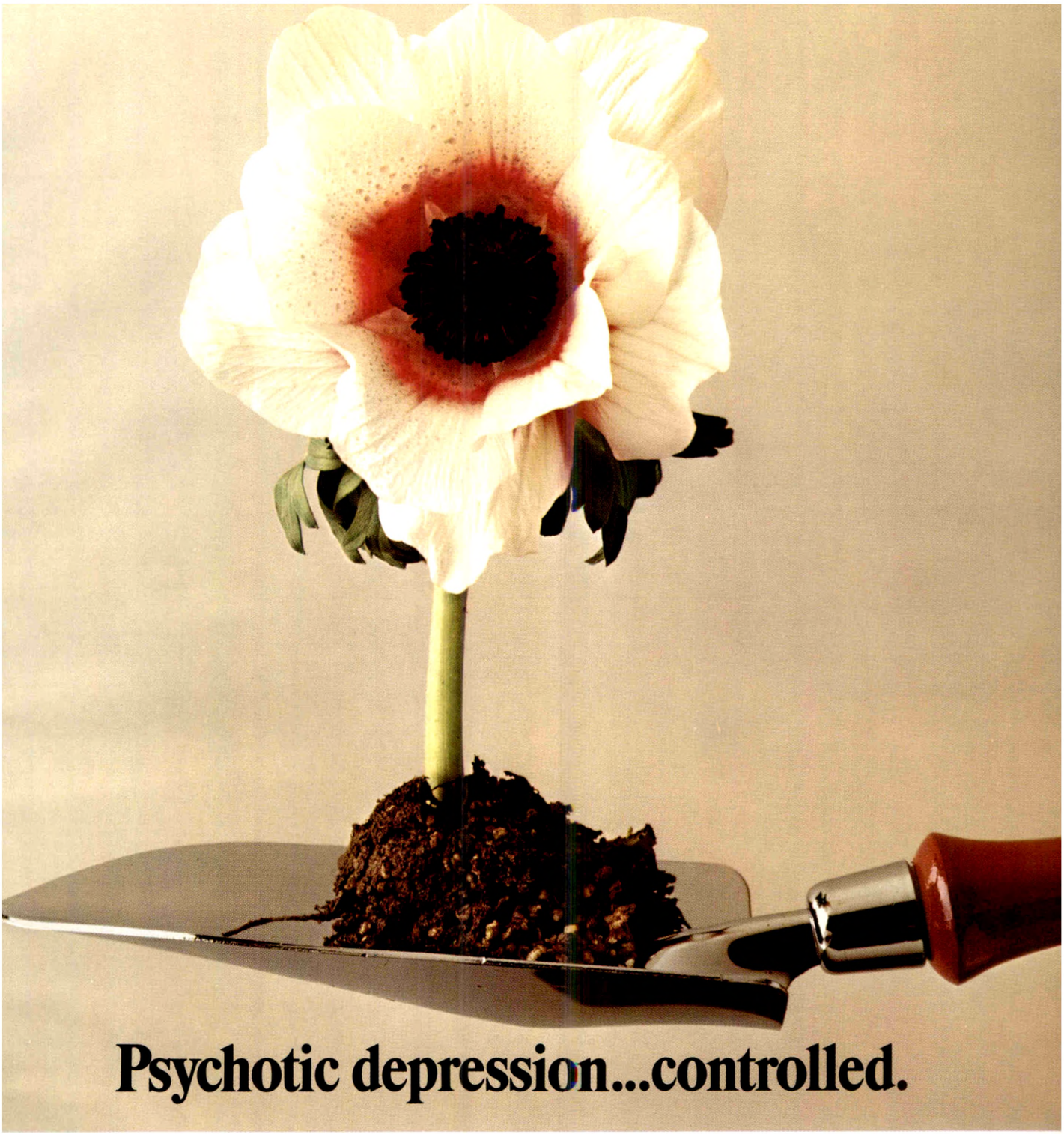
Navane®

(thiothixene) (thiothixene hydrochloride)

Capsules 1 mg., 2 mg., 5 mg., 10 mg. Concentrate 5 mg./cc., Intramuscular 2 mg./cc.

to help control psychotic behavior

For prescribing information, including adverse reactions and contraindications, please see last page of this advertisement.



Psychotic depression...controlled.

Navane (thiothixene) helps reduce the intensity and frequency of depression as manifested in psychotic disorders. Mental and motor retardation may be replaced by an increasing interest in self and environment and a return to productive activity. Severe mood disorders may be relieved to encourage cooperation with therapy and daily routine. Navane...an effective anti-psychotic.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

Navane®

(thiothixene) (thiothixene hydrochloride)

Capsules 1 mg., 2 mg., 5 mg., 10 mg. Concentrate 5 mg./cc., Intramuscular 2 mg./cc.

to help control psychotic depression

For prescribing information, including adverse reactions and contraindications, please see following page.

Navane® (thiothixene) (thiothixene hydrochloride)

Capsules: 1 mg., 2 mg., 5 mg., 10 mg.
Concentrate: 5 mg./cc.
Intramuscular: 2 mg./cc.

PRESCRIBING INFORMATION
Navane® (thiothixene)
Capsules 1 mg., 2 mg., 5 mg., 10 mg.
(thiothixene hydrochloride)
Concentrate 5 mg./cc., Intramuscular 2 mg./cc.

Actions. Navane is a psychotropic agent of the thioxanthene series. Navane possesses certain chemical and pharmacological similarities to the piperazine phenothiazines and differences from the aliphatic group of phenothiazines. Navane's mode of action has not been clearly established.

Indications. Navane is effective in the management of manifestations of psychotic disorders.

Contraindications. Navane is contraindicated in patients with circulatory collapse, comatose states, central nervous system depression due to any cause, and blood dyscrasias. Navane is contraindicated in individuals who have shown hypersensitivity to the drug. It is not known whether there is a cross-sensitivity between the thioxanthenes and the phenothiazine derivatives, but this possibility should be considered.

Warnings. *Usage in Pregnancy* – Safe use of Navane during pregnancy has not been established. Therefore, this drug should be given to pregnant patients only when, in the judgment of the physician, the expected benefits from the treatment exceed the possible risks to mother and fetus. Animal reproduction studies and clinical experience to date have not demonstrated any teratogenic effects.

In the animal reproduction studies with Navane (thiothixene), there was some decrease in conception rate and litter size, and an increase in resorption rate in rats and rabbits, changes which have been similarly reported with other psychotropic agents. After repeated oral administration to rats (5 to 15 mg./kg./day), rabbits (3 to 50 mg./kg./day), and monkeys (1 to 3 mg./kg./day) before and during gestation, no teratogenic effects were seen. (See Precautions.)

Usage in children—The use of Navane in children under 12 years of age is not recommended because safety and efficacy in the pediatric age group have not been established.

As is true with many CNS drugs, Navane may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks such as driving a car or operating machinery, especially during the first few days of therapy. Therefore, the patient should be cautioned accordingly.

As in the case of other CNS-acting drugs, patients receiving Navane should be cautioned about the possible additive effects (which may include hypotension) with CNS depressants and with alcohol.

Precautions. An antiemetic effect was observed in animal studies with Navane; since this effect may also occur in man, it is possible that Navane (thiothixene) may mask signs of overdosage of toxic drugs and may obscure conditions such as intestinal obstruction and brain tumor.

In consideration of the known capability of Navane and certain other psychotropic drugs to precipitate convulsions, extreme caution should be used in patients with a history of convulsive disorders or those in a state of alcohol withdrawal since it may lower the convulsive threshold. Although Navane potentiates the actions of the barbiturates, the dosage of the anticonvulsant therapy should not be reduced when Navane is administered concurrently.

Caution as well as careful adjustment of the dosage is indicated when Navane is used in conjunction with other CNS depressants other than anticonvulsant drugs.

Though exhibiting rather weak anticholinergic properties, Navane should be used with caution in patients who are known or suspected to have glaucoma, or who might be exposed to extreme heat, or who are receiving atropine or related drugs.

Use with caution in patients with cardiovascular disease.

Also, careful observation should be made for pigmentary retinopathy and lenticular pigmentation (fine lenticular pigmentation has been noted in a small number of patients treated with Navane [thiothixene] for prolonged periods). Blood dyscrasias (agranulocytosis, pancytopenia, thrombocytopenic purpura), and liver damage (jaundice, biliary stasis), have been reported with related drugs.

Undue exposure to sunlight should be avoided. Photosensitive reactions have been reported in patients on Navane.

Intramuscular Administration—As with all intramuscular preparations, Navane (thiothixene hydrochloride) Intramuscular should be injected well within the body of a relatively large muscle. The preferred sites are the upper outer quadrant of the buttock (i.e., gluteus maximus) and the midlateral thigh.

The deltoid area should be used only if well developed such as in certain adults and older children, and then only with caution to avoid radial nerve injury. Intramuscular injections should not be made into the lower- and mid-thirds of the upper arm. As with all intramuscular injections, aspiration is necessary to help avoid inadvertent injection into a blood vessel.

Adverse Reactions. *Note:* Not all of the following reactions have been reported with Navane. However, since Navane has certain chemical and pharmacologic similarities to the phenothiazines, all of the known side effects and toxicity associated with phenothiazine therapy should be borne in mind when Navane (thiothixene) is used.

Cardiovascular effects: Tachycardia, hypotension, lightheadedness and syncope. In the event hypotension occurs, epinephrine should not be used as a pressor agent since a paradoxical further lowering of blood pressure may result. Nonspecific EKG changes have been observed in some patients receiving Navane. These changes are usually reversible and frequently disappear on continued Navane therapy. The clinical significance of these changes is not known.

CNS effects: Drowsiness, usually mild, may occur, although it usually subsides with continuation of Navane therapy. The incidence of sedation appears to be similar to that of the piperazine group of phenothiazines, but less than that of certain aliphatic phenothiazines. Restlessness, agitation and insomnia have been noted with Navane. Seizures and paradoxical exacerbation of psychotic symptoms have occurred with Navane infrequently.

Hyperreflexia has been reported in infants delivered from mothers having received structurally related drugs.

In addition, phenothiazine derivatives have been associated with cerebral edema and cerebrospinal fluid abnormalities.

Extrapyramidal symptoms, such as pseudoparkinsonism, akathisia, and dystonia have been reported. Management of these extrapyramidal symptoms depends upon the type and severity. Rapid relief of acute symptoms may require the use of an injectable antiparkinson agent. More slowly emerging symptoms may be managed by reducing the dosage of Navane and/or administering an oral antiparkinson agent.

Persistent Tardive Dyskinesia: Although not reported with Navane, certain antipsychotic agents have been associated with persistent dyskinesias. Tardive dyskinesia may appear in some patients on long term therapy or may occur after drug therapy has been discontinued. The risk seems to be greater in elderly patients on high dose therapy, especially females. The symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movements of the tongue, face, mouth or jaw (e.g., protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Sometimes these may be accompanied by involuntary movements of extremities.

There is no known effective treatment for tardive dyskinesia; antiparkinsonism agents usually do not alleviate the symptoms of this syndrome. It is suggested that all antipsychotic agents be discontinued if these symptoms appear.

Should it be necessary to reinstitute treatment, or increase the dosage of the agent, or switch to a different antipsychotic agent, the syndrome may be masked.

It has been reported that fine vermicular movements of the tongue may be an early sign of the syndrome and if the medication is stopped at that time, the syndrome may not develop.

Hepatic effects: Elevations of serum transaminase and alkaline phosphatase, usually transient, have been infrequently observed in some patients. No clinically confirmed cases of jaundice attributable to Navane (thiothixene) have been reported.

Hematologic effects: As is true with certain other psychotropic drugs, leukopenia and leucocytosis, which are usually transient, can occur occasionally with Navane. Other antipsychotic drugs have been associated with agranulocytosis, eosinophilia, hemolytic anemia, thrombocytopenia and pancytopenia.

Allergic reactions: Rash, pruritus, urticaria, photosensitivity and rare cases of anaphylaxis have been reported with Navane. Although not experienced with Navane, exfoliative dermatitis and contact dermatitis (in nursing personnel) have been reported with certain phenothiazines.

Endocrine disorders: Lactation, moderate breast enlargement and amenorrhea have occurred in a small percentage of females receiving Navane. If persistent, this may necessitate a reduction in dosage or the discontinuation of therapy. Phenothiazines have been associated with false positive pregnancy tests, gynecomastia, hypoglycemia, hyperglycemia, and glycosuria.

Autonomic effects: Dry mouth, blurred vision, nasal congestion, constipation, increased sweating, increased salivation, and impotence have occurred infrequently with Navane therapy. Phenothiazines have been associated with miosis, mydriasis, and adynamic ileus.

Other adverse reactions: Hyperpyrexia, anorexia, nausea, vomiting, diarrhea, increase in appetite and weight, weakness or fatigue, polydipsia and peripheral edema.

NOTE: Sudden deaths have occasionally been reported in patients who have received certain phenothiazine derivatives. In some cases the cause of death was apparently cardiac arrest or asphyxia due to failure of the cough reflex. In others, the cause could not be determined nor could it be established that death was due to phenothiazine administration because safe conditions for its use have not been established.

Dosage and Administration. Dosage of Navane should be individually adjusted depending on the chronicity and severity of the condition. In general, small doses should be used initially and gradually increased to the optimal effective level, based on patient response.

Usage in children under 12 years of age is not recommended.

Navane Intramuscular Solution—For Intramuscular Use Only. Where more rapid control and treatment of behavior is desirable, the intramuscular form of Navane (thiothixene hydrochloride) may be indicated. It is also of benefit where the very nature of the patient's symptomatology, whether acute or chronic, renders oral administration impractical or even impossible.

For treatment of acute symptomatology or in patients unable or unwilling to take oral medication, the usual dose is 4 mg. of Navane Intramuscular administered 2 to 4 times daily. Dosage may be increased or decreased depending on response. Most patients are controlled on a total daily dosage of 16 to 20 mg. The maximum recommended dosage is 30 mg./day. An oral form should supplant the injectable form as soon as possible. It may be necessary to adjust the dosage when changing from the intramuscular to oral dosage forms. Dosage recommendations for Navane Capsules and Concentrate appear in the following paragraphs.

Navane Capsules; Navane Concentrate—In milder conditions, an initial dose of 2 mg. three times daily. If indicated, a subsequent increase to 15 mg./day total daily dose is often effective.

In more severe conditions, an initial dose of 5 mg. twice daily.

The usual optimal dose is 20 to 30 mg. daily. If indicated, an increase to 60 mg./day total daily dose is often effective. Exceeding a total daily dose of 60 mg. rarely increases the beneficial response.

Some patients have been successfully maintained on once-a-day Navane (thiothixene) therapy.

Overdosage. Manifestations include muscular twitching, drowsiness, and dizziness. Symptoms of gross overdosage may include CNS depression, rigidity, weakness, torticollis, tremor, salivation, dysphagia, hypotension, disturbances of gait, or coma.

Treatment: Essentially symptomatic and supportive. For Navane oral, early gastric lavage is helpful. For Navane oral and intramuscular, keep patient under careful observation and maintain an open airway, since involvement of the extrapyramidal system may produce dysphagia and respiratory difficulty in severe overdosage. If hypotension occurs, the standard measures for managing circulatory shock should be used (I.V. fluids and/or vasoconstrictors).

If a vasoconstrictor is needed, levarterenol and phenylephrine are the most suitable drugs. Other pressor agents, including epinephrine, are not recommended, since phenothiazine derivatives may reverse the usual pressor action of these agents and cause further lowering of blood pressure.

If CNS depression is present, recommended stimulants include amphetamine, dextroamphetamine, or caffeine and sodium benzoate. Picrotoxin or pentylenetetrazol should be avoided. Extrapyramidal symptoms may be treated with antiparkinson drugs.

There are no data on the use of peritoneal or hemodialysis, but they are known to be of little value in phenothiazine intoxication.

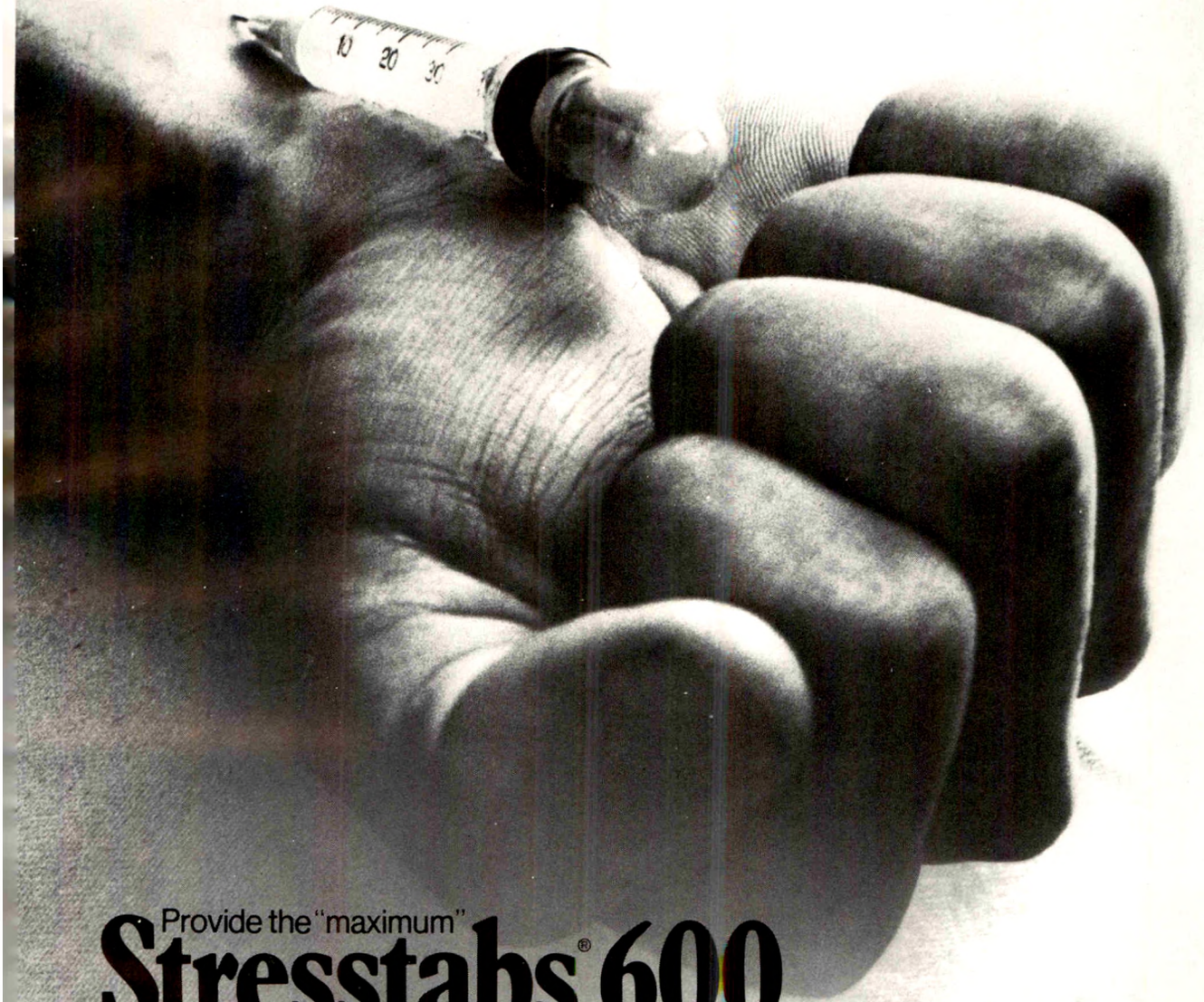
How Supplied. Navane (thiothixene) is available as capsules containing 1 mg., 2 mg., 5 mg., and 10 mg. in bottles of 100 and 1,000.

Navane (thiothixene hydrochloride) Concentrate is available in 120 cc. (4 oz.) bottles with an accompanying dropper calibrated at 2 mg., 4 mg., 5 mg., 6 mg., 8 mg. and 10 mg. Each cc. contains thiothixene hydrochloride equivalent to 5 mg. of thiothixene. Contains alcohol, U.S.P. 7.0% v/v. (small loss unavoidable).

Navane (thiothixene hydrochloride) Intramuscular Solution is available in a 2 cc. amber glass vial in packages of 10. Each cc. contains thiothixene hydrochloride equivalent to 2 mg. of thiothixene, dextrose 5% w/v, benzyl alcohol 0.9% w/v.

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Vitamin C (as Sodium Ascorbate and Niacinamide Ascorbate)	600 mg (20 MDR)
Niacinamide (as Niacinamide Ascorbate)	100 mg (10 MDR)
Vitamin E (as *d*-Alpha Tocopheryl Acid Succinate)	30 Units
Calcium Pantothenate USP	20 mg

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Ritalin®
(methylphenidate) helps the patient respond in mild depression*

Ritalin® hydrochloride ©
(methylphenidate hydrochloride)
TABLETS

INDICATION
Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, FDA has classified the indication as follows:
"Possibly" effective: Mild depression
Final classification of the less-than-effective indications requires further investigation.

CONTRAINDICATIONS
Marked anxiety, tension, and agitation, since Ritalin may aggravate these symptoms. Also contraindicated in patients known to be hypersensitive to the drug and in patients with glaucoma.

WARNINGS
Ritalin is not recommended for children under six years, since safety and efficacy in this age group have not been established. Since sufficient data on safety and efficacy of long-term use of Ritalin in children with minimal brain dysfunction are not yet available, those requiring long-term therapy should be carefully monitored.
Ritalin should not be used for severe depression of either exogenous or endogenous origin or for the prevention of normal fatigue states.
Ritalin may lower the convulsive threshold in patients with or without prior seizures; with or without prior EEG abnormalities, even in absence of seizures. Safe concomitant use of anticonvulsants and Ritalin has not been established. If seizures occur, Ritalin should be discontinued.
Use cautiously in patients with hypertension.

Drug Interactions
Ritalin may decrease the hypotensive effect of guanethidine. Use cautiously with pressor agents and MAO inhibitors. Ritalin may inhibit the metabolism of coumarin anticoagulants, anticonvulsants (phenobarbital, diphenylhydantoin, primidone), phenylbutazone, and tricyclic antidepressants (imipramine, desipramine). Downward dosage adjustments of these drugs may be required when given concomitantly with Ritalin.

Usage in Pregnancy
Adequate animal reproduction studies to establish safe use of Ritalin during pregnancy have not been conducted. Therefore, until more information is available, Ritalin should not be prescribed for women of childbearing age unless, in the opinion of the physician, the potential benefits outweigh the possible risks.

Drug Dependence
Ritalin should be given cautiously to emotionally unstable patients, such as those with a history of drug dependence or alcoholism, because such patients may increase dosage on their own initiative.
Chronically abusive use can lead to marked tolerance and psychic dependence with varying degrees of abnormal behavior. Frank psychotic episodes can occur, especially with parenteral abuse. Careful supervision is required during drug withdrawal, since severe depression as well as the effects of chronic overactivity can be unmasked. Long-term follow-up may be required because of the patient's basic personality disturbances.

PRECAUTIONS
Patients with an element of agitation may react adversely; discontinue therapy if necessary.
Periodic CBC and platelet counts are advised during prolonged therapy.

ADVERSE REACTIONS
Nervousness and insomnia are the most common adverse reactions but are usually controlled by reducing dosage and omitting the drug in the afternoon or evening.
Other reactions include: hypersensitivity (including skin rash, urticaria, fever, arthralgia, exfoliative dermatitis, and erythema multiforme with histopathological findings of necrotizing vasculitis); anorexia; nausea; dizziness; palpitations; headache; dyskinesia; drowsiness; blood pressure and pulse changes, both up and down; tachycardia; angina; cardiac arrhythmias; abdominal pain; weight loss during prolonged therapy. In children, loss of appetite, abdominal pain, weight loss during prolonged therapy, insomnia, and tachycardia may occur more frequently. Toxic psychosis has been reported.

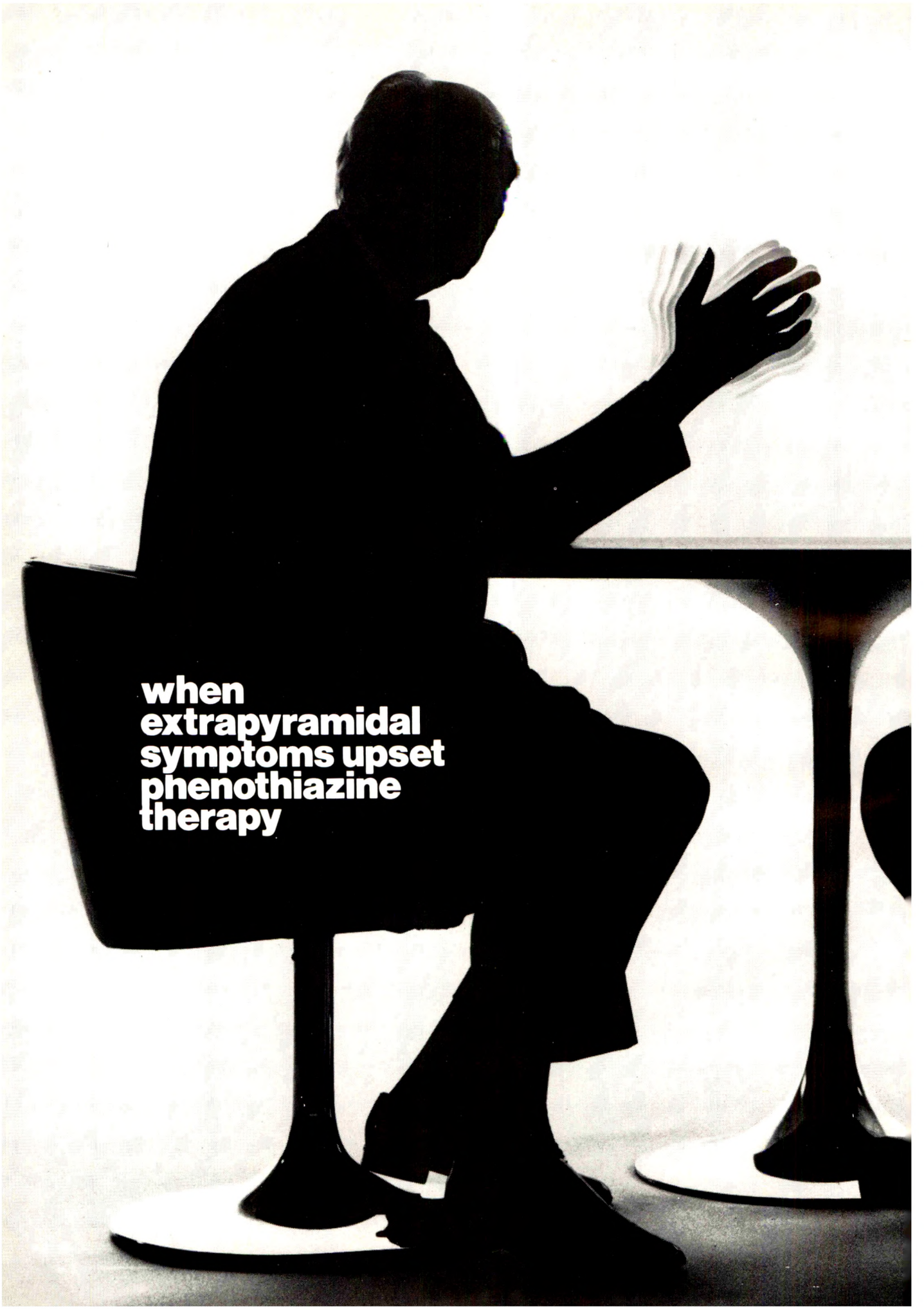
DOSAGE AND ADMINISTRATION
Adults
Administer orally in divided doses 2 or 3 times daily, preferably 30 to 45 minutes before meals. Dosage will depend upon indication and individual response.
Average dosage is 20 to 30 mg daily. Some patients may require 40 to 60 mg daily. In others, 10 to 15 mg daily will be adequate. The few patients who are unable to sleep if medication is taken late in the day should take the last dose before 6 p.m.

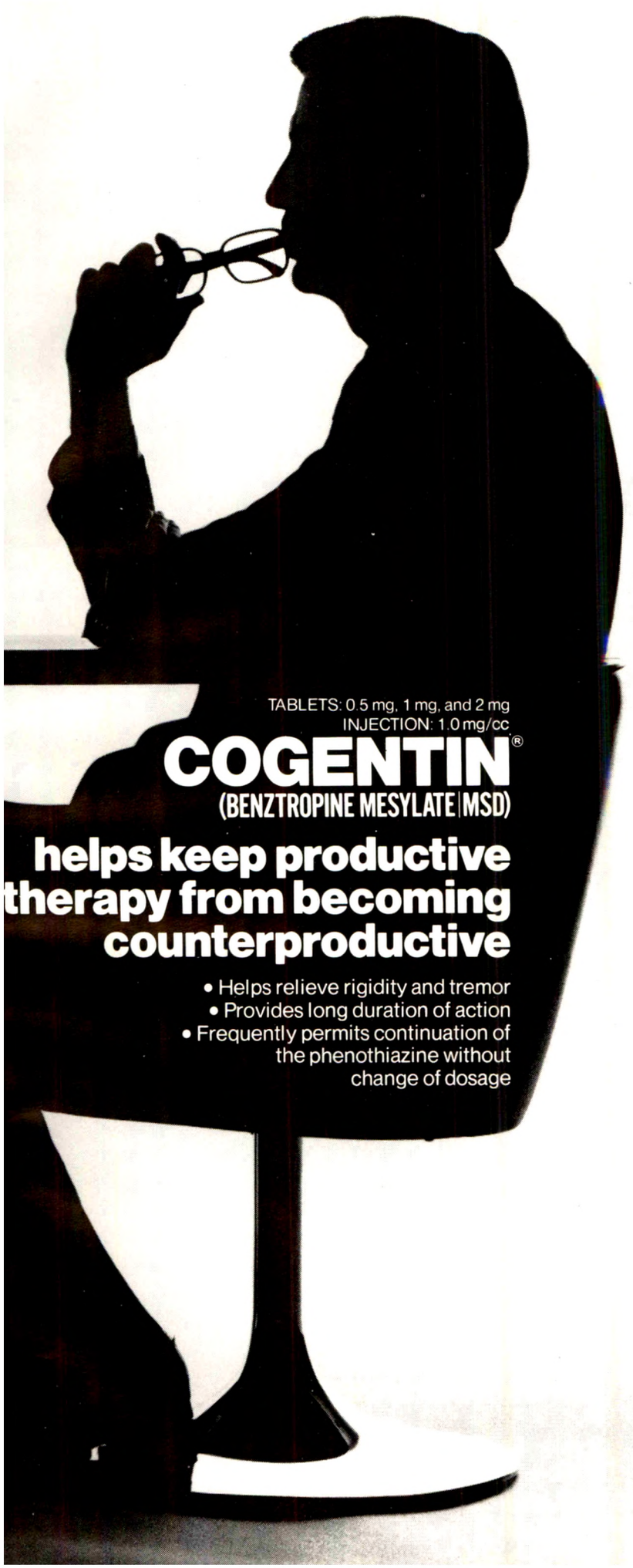
HOW SUPPLIED
Tablets, 20 mg (peach, scored); bottles of 100 and 1000.
Tablets, 10 mg (pale green, scored); bottles of 100, 500, 1000 and Strip Dispensers of 100.
Tablets, 5 mg (pale yellow); bottles of 100, 500, and 1000.
Consult complete product literature before prescribing.

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*This drug has been evaluated as possibly effective for this indication. See brief prescribing information.

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phenothiazine
therapy



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helps keep productive therapy from becoming counterproductive

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- Frequently permits continuation of the phenothiazine without change of dosage

Contraindications: Children under three years of age; use cautiously in older children.

Warnings: Safe use in pregnancy not established. May impair mental and/or physical abilities required for performance of hazardous tasks, such as operating machinery or driving a motor vehicle.

Precautions: Because of cumulative action, continued supervision is advisable. Closely observe patients with tendencies to tachycardia or hypotension and those with prostatic hypertrophy. Dysuria may occur, but rarely becomes a problem. Large doses may cause complaints of weakness and inability to move particular muscle groups, requiring dosage adjustment.
Mental confusion and excitement may occur with large doses, or in susceptible patients; visual hallucinations reported occasionally. May intensify mental symptoms when used to treat extrapyramidal disorders due to CNS drugs, such as reserpine and phenothiazines, in patients with mental disorders; in such patients, increased doses of antiparkinsonian drugs can precipitate toxic psychosis; observe patients carefully, especially at the beginning of treatment or if dosage is increased. Masking action on possible development of permanent extrapyramidal symptoms with prolonged phenothiazine therapy has not been investigated. Patients with a poor mental outlook are usually poor candidates for therapy.
May produce anhidrosis; give with caution during hot weather, especially to the old, the chronically ill, the alcoholic, those who have central nervous system disease, those who do manual labor in a hot environment, and those with disturbances in sweating. If anhidrosis appears, reduce dosage so that ability to maintain body heat equilibrium is not impaired. Occurrence of glaucoma is a possibility; probably should not be used in angle-closure glaucoma.
Large doses generally cannot be tolerated by older patients, thin patients, or patients with arteriosclerotic parkinsonism. Do not terminate other antiparkinsonism agents abruptly; reduce gradually. In drug-induced parkinsonism, closely observe patients for severe reactions, and temporarily discontinue COGENTIN (Benztropine Mesylate, MSD) if they appear; do not extend therapy longer than necessary to counteract the extrapyramidal disorders; although the psychotropic drug frequently can be continued without change of dosage, a decrease might be indicated.

Adverse Reactions: Adverse reactions may be anticholinergic and/or antihistaminic. Dry mouth, blurred vision, nausea, nervousness may develop. If dry mouth causes difficulty in swallowing or speaking, or loss of appetite and weight, reduce dosage, or discontinue drug temporarily. Vomiting occurs infrequently and may be controlled by temporary discontinuation, followed by resumption at a lower dosage. Constipation, numbness of the fingers, listlessness, and depression may develop. Occasionally, an allergic reaction, e.g., skin rash, develops; sometimes this can be controlled by reducing dosage, but occasionally requires discontinuation.

Supplied: Tablets in three strengths: 0.5 mg and 1 mg benztropine mesylate, in bottles of 100, and 2 mg benztropine mesylate, in bottles of 100 and 1000. Injection, containing 1.0 mg benztropine mesylate and 9.0 mg sodium chloride per cc, in 2-cc ampuls.

For more detailed information, consult your MSD representative or see the Direction Circular. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

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AUTHORS: Raymond Glasscote, Jerome H. Jaffe, James N. Sussex, John Ball, Leon Brill

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AUTHORS: Raymond Glasscote, Michael Fishman, Meyer Sonis

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Unable to concentrate, the geriatric depressive tends to take little interest in the affairs around him. His reactions are slow and delayed. He speaks very little. When he does, it's mostly to complain of his insomnia, fatigue, or constipation. Relatives often assume that many of the elderly are this way because they are old. In reality, they may be clinically depressed.

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It can help alleviate the somatic symptoms that often accompany depression.

A good response is generally observed in reactive depressions precipitated by a loss.

Because sedation may occur in some persons, especially the elderly, patients should be cautioned against driving a car or operating dangerous machinery.

Lower dosages are recommended for elderly patients and adolescents.

Please read the prescribing information for details of usage, precautions, warnings, contraindications, adverse experiences, and dosage recommendations. A summary of the prescribing information begins on the back of this page.

Tofranil® **Geigy**
imipramine hydrochloride USP





Tofranil® imipramine hydrochloride USP

Contraindications: The concomitant use of this agent and monoamine oxidase inhibiting (M.A.O.I.) compounds is contraindicated. Hyperpyretic crises or severe convulsive seizures may occur. Potentiation of adverse effects can be serious or even fatal. An interval of at least 14 days after M.A.O.I. therapy has been discontinued should be allowed before this drug may be substituted. Initial dosage should be low, increases should be gradual, and the patient's progress should be carefully observed. The drug is also contraindicated (a) during the acute recovery period after myocardial infarction, (b) in patients with known hypersensitivity to the drug. Cross-sensitivity to other dibenzazepine compounds should be kept in mind.

Warnings: *Usage in Pregnancy:* Safe use of imipramine during pregnancy and lactation has not been established; therefore, in administering the drug to pregnant patients, nursing mothers, or women of childbearing potential, the potential benefits must be weighed against the possible hazards. Animal reproduction studies have yielded inconclusive results. There have been clinical reports of congenital malformation associated with the use of this drug, but a causal relationship has not been confirmed.

Extreme caution should be used when this drug is given to:

- patients with cardiovascular disease because of the possibility of conduction defects, arrhythmias, myocardial infarction, strokes and tachycardia;
- patients with increased intraocular pressure, history of urinary retention, or history of narrow-angle glaucoma because of the drug's anticholinergic properties;
- hyperthyroid patients or those on thyroid medication because of the possibility of cardiovascular toxicity;
- patients with a history of seizure disorder because this drug has been shown to lower the seizure threshold;
- patients receiving guanethidine or similar agents since imipramine may block the pharmacologic effects of these drugs.

Usage in Children: Pending evaluation of results from clinical trials in children, the drug is not recommended for use in patients under twelve years of age.

Since the drug may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks, such as operating an automobile or machinery, the patient should be cautioned accordingly.

Precautions: Because of the possibility of suicide in seriously depressed patients, careful supervision during the early phase of treatment is necessary and hospitalization may be required. Prescriptions should be written for the smallest amount feasible.

Hypomanic or manic episodes may occur, particularly in patients with cyclic disorders. Such reactions may necessitate discontinuation of the drug. If needed, imipramine may be resumed in lower dosage when these episodes are relieved. Administration of a tranquilizer may be useful in controlling such episodes.

Prior to elective surgery, imipramine should be discontinued for as long as the clinical situation will allow.

An activation of the psychosis may occasionally be observed in schizophrenic patients and may require reduction of dosage and the addition of a phenothiazine.

In occasional susceptible patients or in those receiving anticholinergic drugs (including antiparkinsonism agents) in addition, the atropine-like effects may become more pronounced (e.g. paralytic ileus). Close supervision and careful adjustment of dosage is required when this drug is administered concomitantly with anticholinergic or sympathomimetic drugs.

Patients should be warned that the concomitant use of alcoholic beverages may be associated with exaggerated effects.

Both elevation and lowering of blood sugar levels have been reported.

Concurrent administration of imipramine with electroshock therapy may increase the hazards; such treatment should be limited to those patients for whom it is essential.

Adverse Reactions: *Carciovascular:* Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke, falls.

Psychiatric: Confusional states (especially in the elderly) with hallucinations, disorientation, delusions; anxiety, restlessness, agitation; insomnia and nightmares; hypomania; exacerbation of psychosis.

Neurological: Numbness, tingling, paresthesias of extremities; incoordination, ataxia, tremors; peripheral neuropathy; extrapyramidal symptoms; seizures, alterations in EEG patterns; tinnitus.

Anticholinergic: Dry mouth, and, rarely, associated sublingual adenitis; blurred vision, disturbances of accommodation, mydriasis; constipation, paralytic ileus; urinary retention, delayed micturition, dilation of the urinary tract.

Allergic: Skin rash, petechiae, urticaria, itching, photosensitization (avoid excessive exposure to sunlight); edema (general or of face and tongue), drug fever, cross-sensitivity with desipramine.

Hematologic: Bone marrow depression including agranulocytosis; eosinophilia; purpura; thrombocytopenia. Leukocyte and differential counts should be performed in any patient who develops fever and sore throat during therapy; the drug should be discontinued if there is evidence of pathological neutrophil depression.

Gastrointestinal: Nausea and vomiting, anorexia, epigastric distress, diarrhea; peculiar taste, stomatitis, abdominal cramps, black tongue.

Endocrine: Gynecomastia in the male; breast enlargement and galactorrhea in the female; increased or decreased libido, impotence; testicular swelling; elevation or depression of blood sugar levels.

Other: Jaundice (simulating obstructive); altered liver function; weight gain or loss; perspiration; flushing; urinary frequency; drowsiness, dizziness, weakness and fatigue; headache; parotid swelling; alopecia.

Withdrawal Symptoms: Though not indicative of addiction, abrupt cessation of treatment after prolonged therapy may produce nausea, headache and malaise.

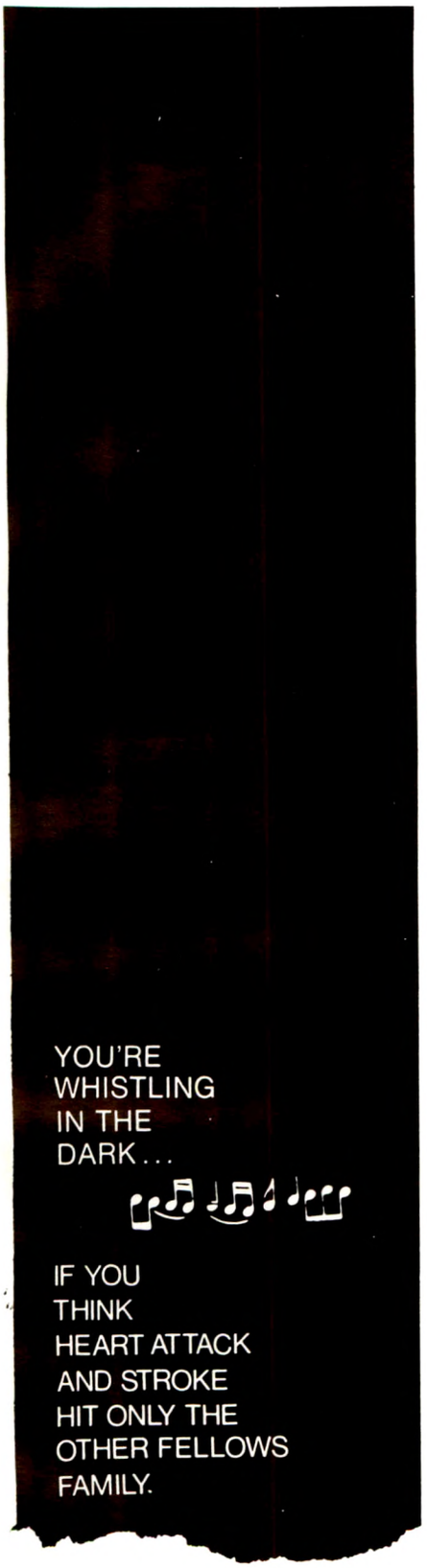
How Supplied: Round tablets of 25 and 50 mg.; triangular tablets of 10 mg. for geriatric and adolescent use; and ampuls, each containing 25 mg. in 2 cc. for I.M. administration.

(B)98-146-850-J (7/71)

For complete details, including dosage, please refer to the full prescribing information.

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HEALTH INSURANCE AND PSYCHIATRIC CARE: UTILIZATION AND COST

AUTHORS: Louis S. Reed, Ph.D., Evelyn S. Myers, Patricia L. Scheidemandel

Those who hedge on granting the mentally ill adequate and equitable coverage under any national health insurance system have done so mainly on the ground that it would bankrupt the system. This book shows that this is not so. The most comprehensive study of the utilization and cost of care for mental disorders under health insurance ever undertaken, it gives facts and figures on more than 40 private health insurance plans or organizations, Medicare, other public programs in this country, and Canadian programs of hospital and medical service insurance. A wealth of data on inpatient care, in-hospital physicians' services, and ambulatory care is provided.

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CONTRAINDICATIONS TRILAFON is contraindicated in drug-associated central nervous system depression (barbiturates, alcohol, narcotics, analgesics, antihistamines). Perphenazine is contraindicated in the presence of existing blood dyscrasias, bone marrow depression and pre-existing liver damage, and in patients who are hypersensitive to perphenazine.

TRILAFON Injection should not be given to patients in coma or severely depressed states.

WARNINGS Usage in pregnancy: Perphenazine should only be given to pregnant patients when, in the judgment of the physician, the potential benefits outweigh the possible risks.

Perphenazine can lower the convulsive threshold in susceptible individuals; it should be used with caution in patients with convulsive disorders. If the patient is being treated with an anticonvulsant agent, increased dosage of that agent may be required when perphenazine is used concomitantly.

Perphenazine should be used with caution in patients with psychic depression.

Perphenazine is not recommended for children under 12 years of age.

Perphenazine may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks, such as driving a car or operat machinery.

PRECAUTIONS As with any potent medication, patients receiving perphenaz should be under medical supervision, particularly if they are receiving h doses. Patients who have had any severe reaction to phenothiazines or to i pramine should be treated cautiously, under close medical supervision.

Although the following adverse reactions have not been reported in patie treated with perphenazine, the possibility that they might occur with TRILAF should be considered; blood dyscrasias (pancytopenia, thrombocytopenic purpu leukopenia, eosinophilia); liver damage (biliary stasis); narrowing of the vis fields; pigmentation of the retina, cornea, or lens; cerebral edema; polypha photophobia; hyperpyrexia.

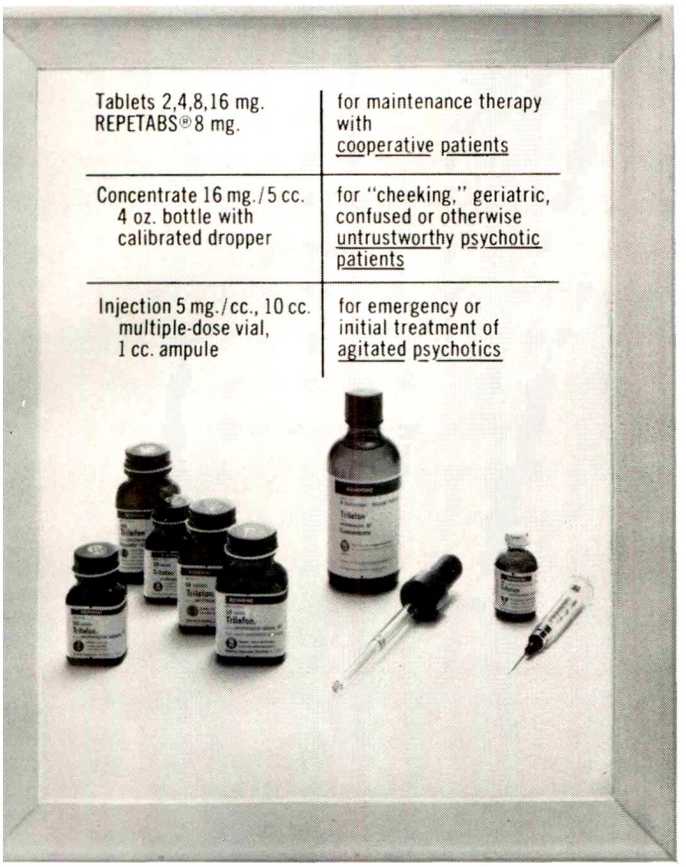
If hypotension develops, levarterenol (norepinephrine) can be used, but epinephrine, because epinephrine's action is blocked and partly reversed by p phenazine. Severe, acute hypotension has occurred with the use of phenoth zines and is of particular concern in patients with mitral insufficiency pheochromocytoma.

A significant rise in body temperature may indicate an idiosyncratic react to perphenazine; treatment with perphenazine should be stopped if this occu

The antiemetic effect of perphenazine can obscure signs of toxicity due overdosage of other drugs, or mask the symptoms of disease (eg, brain tumor intestinal obstruction).

Contact dermatitis has been reported with a perphenazine solution; therefo contact of hands or clothing by those handling perphenazine solutions sho be avoided.

POTENTIATION Since phenothiazines can potentiate the central-nervous-syste depressant actions of opiates, antihistamines, barbiturates, and alcohol, I



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the usual dosage of these agents is required when they are administered
›mitantly with TRILAFON. Patients should be cautioned that their response
cohol may be increased while they are being treated with TRILAFON.
enothiazines also potentiate the effects of atropine, heat, and phosphorus
:ticides, and should be used with caution in persons exposed to these agents.

RSE REACTIONS *Extrapyramidal reactions:* dystonia including protru-
discoloration, aching and rounding of the tongue; tonic spasm of the mas-
›ry muscles, tight feeling in the throat, slurred speech, dysphagia, oculogyric
s, trismus, torticollis, retrocollis, muscle weakness, and aching and numb-
of the limbs; akathisia; motor restlessness; dyskinesia, parkinsonism;
rreflexia; and ataxia. The incidence and severity of these reactions usually
ase with increased dosage, but have occurred in some patients receiving
dosage. Reduction in dosage or treatment with an antispasmodic agent will
lly control extrapyramidal reactions. In some instances, however, these
ions may persist after discontinuation of treatment with perphenazine.
rsistent tardive dyskinesia: As with all antipsychotic agents, tardive dys-
sia may appear in some patients on long-term therapy or may appear after
therapy has been discontinued. The risk appears to be greater in elderly
nts on high-dose therapy, especially females. The symptoms are persistent
in some patients appear to be irreversible. The syndrome is characterized by
mical involuntary movements of the tongue, face, mouth or jaw (eg, pro-
on of tongue, puffing of cheeks, puckering of mouth, chewing movements).
etimes these may be accompanied by involuntary movements of extremities.
e is no known effective treatment for tardive dyskinesia; antiparkinsonism
ts usually do not alleviate the symptoms of this syndrome. It is suggested
all antipsychotic agents be discontinued if these symptoms appear. Should
necessary to reinstitute treatment, or increase the dosage of the agent, or
:h to a different antipsychotic agent, the syndrome may be masked. It has
reported that fine vermicular movements of the tongue may be an early sign of the syndrome and if the medication is stopped at that time the syndrome may not develop.

Allergic reactions: erythema, pruritus, urticaria, eczema, anaphylactoid reactions, and local and generalized edema. In extremely rare instances, individual idiosyncrasy or hypersensitivity to phenothiazines has resulted in cerebral edema, circulatory collapse, and death. Photosensitization, asthma, and exfoliative dermatitis have also occurred in patients treated with phenothiazines.

Autonomic reactions: blurred vision, dry mouth or salivation, nasal congestion, nausea, vomiting, hypertension, tachycardia, hypotension, anorexia, urinary frequency or incontinence, and constipation. Significant autonomic effects have been infrequent in patients receiving less than 24 mg. perphenazine daily.

Other reactions: endocrine disturbances (lactation, gynecomastia, galactorrhea, disturbances in the menstrual cycle), headaches, mild insomnia, altered cerebrospinal fluid proteins, ECG abnormalities, reactivation of psychosis, paradoxical excitement, paranoid-like reactions, catatonia, and systemic lupus erythematosus-like syndrome. Hypnotic effects appear to be minimal, particularly in patients who are permitted to remain active. The following adverse reactions, though rare, have also been reported to be associated with perphenazine treatment: agranulocytosis; jaundice; hyperpigmentation of the skin; grand mal convulsions; failure of ejaculation; hyperglycemia.

Side effects with intramuscular TRILAFON Injection have been infrequent and transient. Dizziness or significant hypotension after treatment with TRILAFON Injection is a rare occurrence.

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The documented properties of DALMANE® (flurazepam HCl) for sleep

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Prompt sleep induction, effective through the night[1-13]

Consistently effective night after night[2,3,5,6,8-13]

Relative safety[11,14,15*]

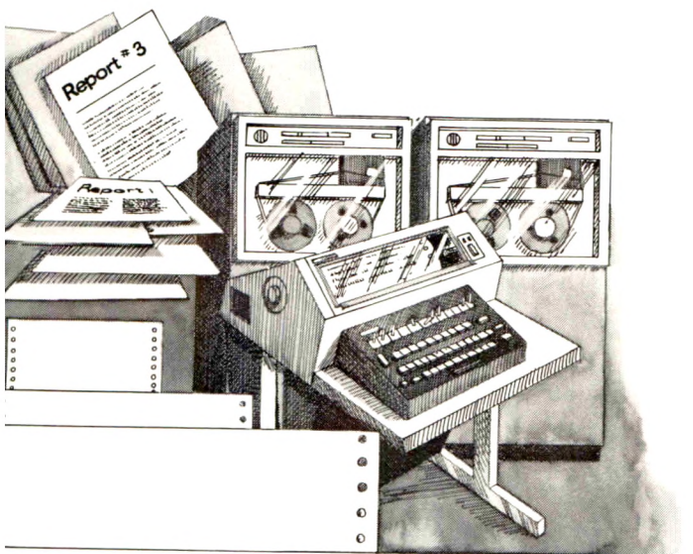
Usefulness in chronically anticoagulated patients[11]

1. Kales, A.: "Psychophysiological and Biochemical Changes Following Use and Withdrawal of Hypnotics," in Kales, A. (ed.): *Sleep: Physiology and Pathology,* Philadelphia, Lippincott, 1969, p. 331. **2.** Kales, J., *et al.: Clin. Pharmacol. Ther., 12*:691, 1971. **3.** Jacobson, A., *et al.: Psychophysiology, 7*:345, 1970. **4.** Kales, A., and Kales, J.: *J.A.M.A., 213*:2229, 1970. **5.** Frost, J. D., Jr.: "A System for Automatically Analyzing Sleep," Scientific Exhibit presented at Clinical Convention, A.M.A., Boston, Nov. 29-Dec. 2, 1970; and at 42nd Annual Scientific Meeting, Aerospace Med. Assoc., Houston, April 26-29, 1971. **6.** Karacan, I., *et al.:* "The Sleep Laboratory in the Investigation of Sleep and Sleep Disturbances," Scientific Exhibit presented at Amer. Psychiat. Assoc., Washington, D.C., May 3-7, 1971. **7.** Hartmann, E.: *Psychopharmacologia (Berl.), 12*:346, 1968. **8.** Dement, W. C.: Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley, N.J. **9.** Vogel, G. W.: Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley, N.J. **10.** Kales, A., and Kales, J. D.: *Pharmacol. Physicians, 4*:1, 1970. **11.** Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley, N.J. **12.** Kales, A., *et al.: Arch. Gen. Psychiat. 23*:226, 1970. **13.** Meyer, J. A.: "Flurazepam Hydrochloride for the Short-Term Treatment of Insomnia in the

*Generally, when adverse effects were reported clinically with Dalmane (flurazepam HCl), they were mild and infrequent. Dizziness, drowsiness, lightheadedness and the like were the side effects noted most often, particularly in the elderly or debilitated. (An initial dose of Dalmane 15 mg should be prescribed for these patients.)

Little "hang-over" effect on awakening[11,14]

Hospitalized Post-Surgical Patient," Scientific Exhibit presented at AAGP, San Francisco, Calif., Sept. 28-Oct. 1, 1970. **14.** Zimmerman, A. M.: *Curr. Ther. Res., 13*:18, 1971. **15.** Greenblatt, D., and Shader, R.: *Ann. Intern. Med., 77*:91, 1972.



Data about Dalmane (flurazepam HCl) on request

The references cited constitute only a part of the Dalmane bibliography. Additional data are available through the Roche Professional Services Department. Augmenting this service is RETRIEVE, a computer-operated data retrieval system which permits massive amounts of data to be searched, reviewed and selected rapidly and accurately. Coded into the computerized index are parameters that include patient age, sex, condition; product dose, side effect, frequency of administration; other medications or therapy; length, type and size of study and pharmacology.

For specific answers to any questions you might have about Dalmane, write or call: Roche Professional Services Department, Roche Laboratories, Nutley, N.J. 07110. Telephone: (201) 235-2355.

Before prescribing Dalmane (flurazepam HCl), please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, e.g., excitement, stimulation and hyperactivity, have also been reported in rare instances.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

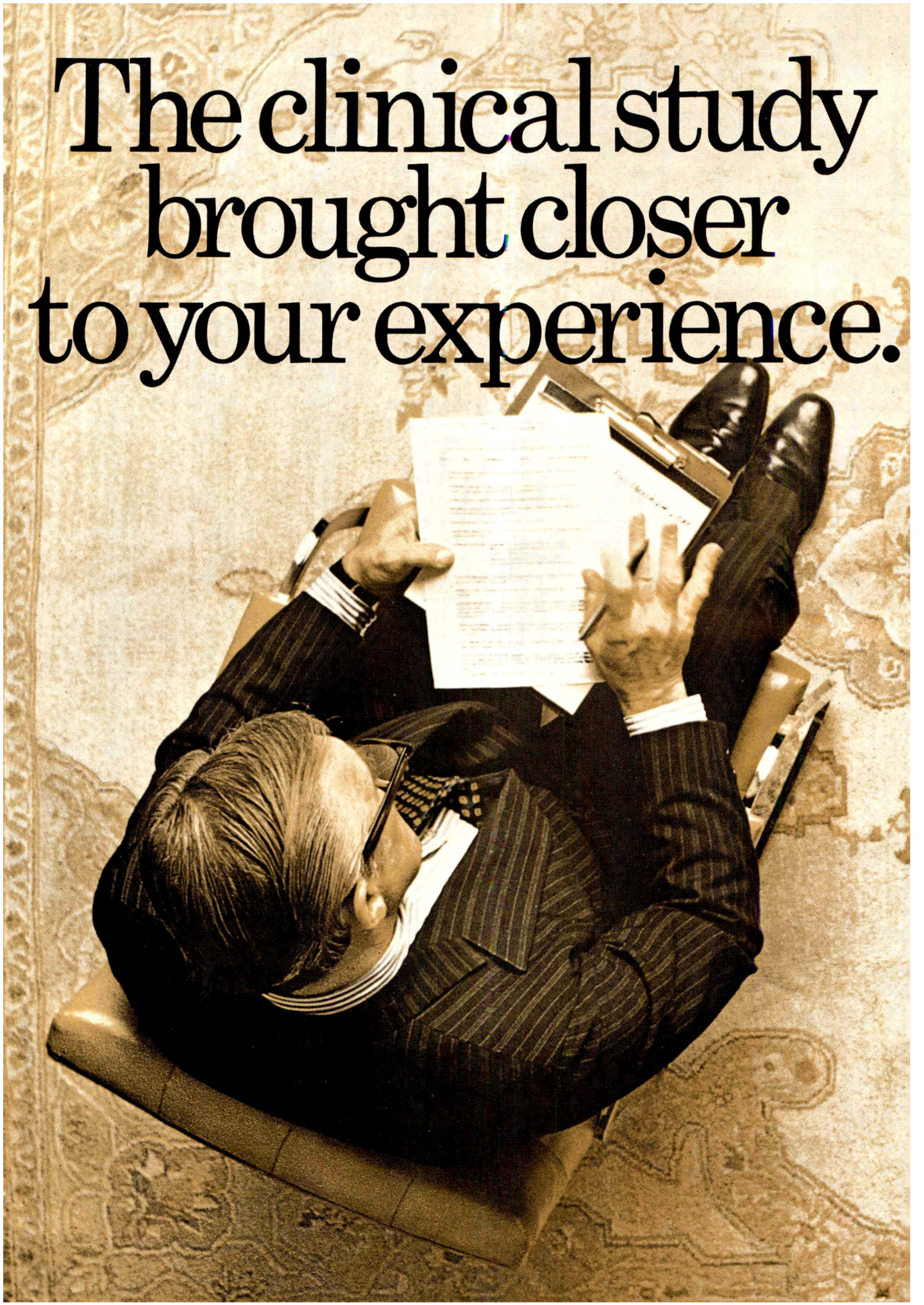
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Six patients (3 men and 3 women) with prominent, persistent, high levels of anxiety (Taylor Manifest Anxiety Scale scores above 25) received Valium (diazepam) and placebo under double-blind conditions for six treatment periods of three days each, with a drug-free day between periods. Two dosage levels of Valium, 5 mg and 10 mg *t.i.d.*, and placebo were each administered for two periods.

Three methods of rating were employed in this study: physician's rating of symptoms, patient's self-rating, and patient's drug preference. Each patient's three main target symptoms were identified and rated by the physician initially and after each visit. Valium, at both dosage levels, gave higher physician ratings of symptom improvement than placebo, although the changes did not reach statistical significance. The six patients rated their own symptoms in order of severity at the initial interview and graded them daily as to the degree of improvement. In the patients' self-rating changes, both dosage levels of Valium gave higher ratings of improvement than placebo. Also, patients' preference recorded at the end of each week of the trial revealed that Valium (both dosage levels) was preferred over placebo to a significant degree.

"Small scale" drug trials use methods of observation and patient management similar to those you use in your practice.

The physician-investigator assessed Valium (diazepam) just as you might. He treated a small number of persistently anxious patients. He saw them frequently, supporting them, and rated changes in symptoms and had his patients do likewise. He noted the patient's preference for one medication over another. He found that Valium was effective, just as others have in larger, conventional studies, and just as you can find in your practice.

If you have not prescribed Valium, select a few overly anxious, psychoneurotic patients with or without associated or secondary depressive symptoms, and give Valium a trial of your own. You'll find it can significantly reduce anxiety and thus may facilitate psychotherapy and make patients more comfortable. Caution patients on Valium against driving or operating machinery. Side effects most commonly reported have been drowsiness, fatigue and ataxia.

*McLeod, W.R.; Mowbray, R. M., and Davies, B.: Scientific exhibit presented at the Interstate Postgraduate Medical Association of North America, Nov. 15-18, 1971, New Orleans, La.

Valium®(diazepam)
2-mg, 5-mg and 10-mg tablets

Please see the following page for a summary of product information.

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For overanxious, tense psychoneurotics with or without associated or secondary depressive symptoms



Effectiveness—Valium (diazepam) can relieve tension-induced symptoms—psychic and somatic—in patients thus overreacting to situational stresses as well as in patients with psychoneuroses.

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Titratable dosage—With Valium, small adjustments in dosage can significantly alter the clinical response. This titratability enables you to tailor your prescriptions for maximum efficiency. There are three tablet strengths from which to choose: 2 mg, 5 mg and 10 mg.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

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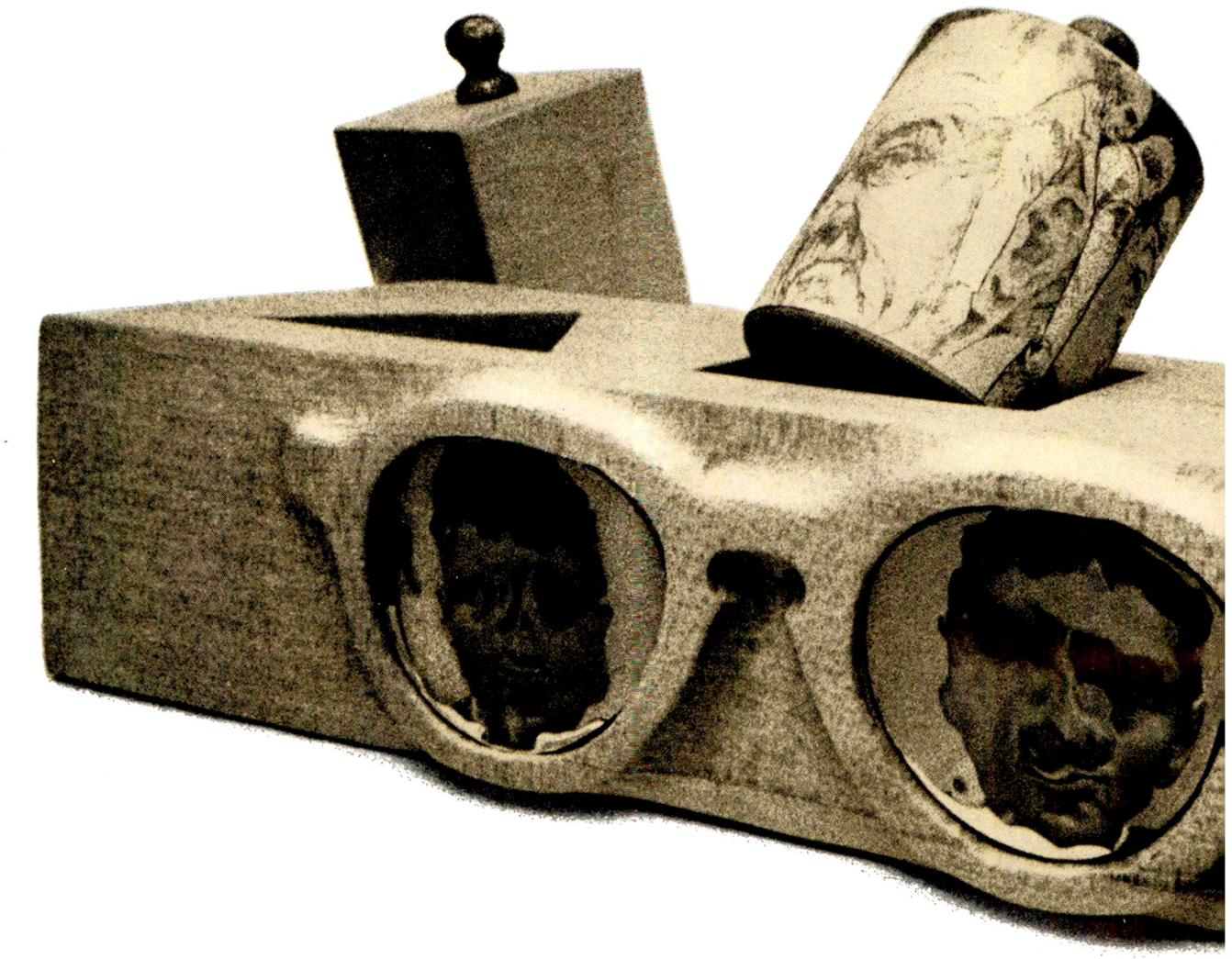
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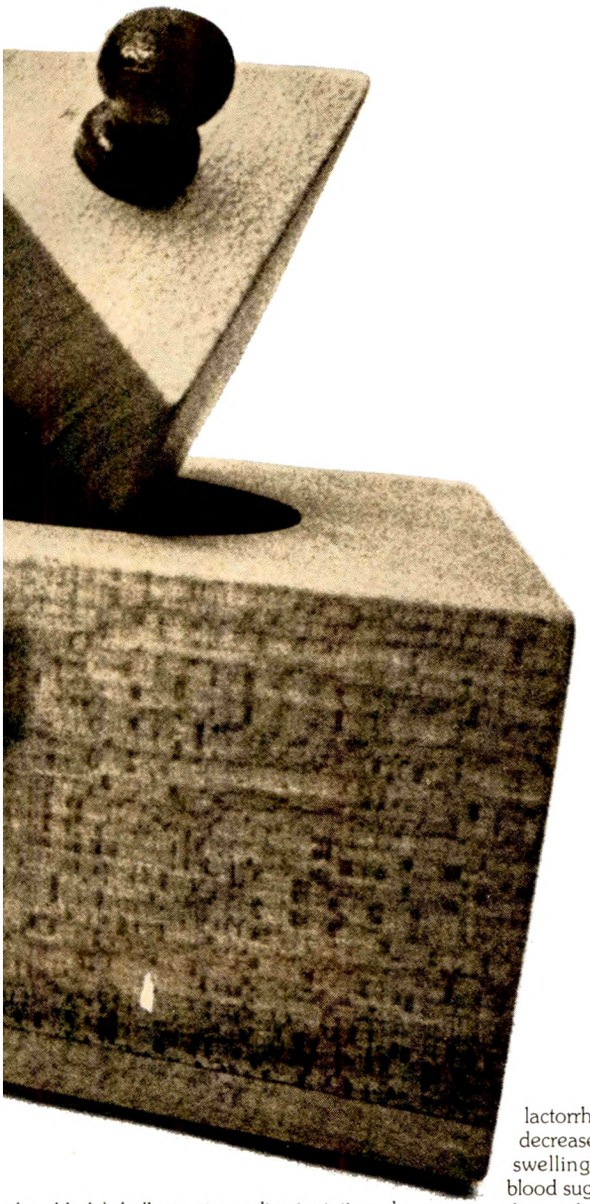
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Precautions: This drug should be dispensed in the least possible quantities to depressed outpatients, since suicide has been accomplished with drugs of this class. It should be kept out of reach of children. Reduce dosage, or alter treatment, if serious adverse effects occur. Norpramin® (desipramine hydrochloride) therapy in patients with manic-depressive illness may induce a hypomanic state after the depressive phase terminates and may cause exacerbation of psychosis in schizophrenic patients. Close supervision and careful adjustment of dosage are required when this drug is given along with anticholinergic or sympathomimetic drugs. While taking this drug response to alcoholic beverages may be exaggerated. There is limited clinical experience in the concurrent administration of ECT and antidepressant drugs; thus, one should consider the possibility of increased risk relative to benefits. Discontinue as soon as possible prior to elective surgery because of possible cardiovascular effects. Hypertensive episodes have been observed during surgery in patients on desipramine hydrochloride. Leukocyte and differential counts should be performed in any patient who develops fever and sore throat during therapy; the drug should be discontinued if there is neutropenia.
Adverse Reactions: *Cardiovascular:* hypotension, hypertension, tachycardia, palpitation, arrhythmias, heart block, myocardial infarction, stroke. *Psychiatric:* confusional states (especially



Coping with Depression

The ability to cope with depressive illness, for the patient and to some degree for the physician, largely depends on hope—a crutch that is usually lacking in the depressed patient. To the depressed patient all the good things of life are bleak, black, or unattainable; all that is bad has been happening or will happen. Helping such a patient to cope with life again, to overcome the incapacitating moods, outlooks, and fears which characterize depression, can be a most rewarding experience for the physician.

Although Norpramin® (desipramine hydrochloride) is relatively rapid-acting, the patient should be told that he will not feel better immediately but that he will gradually become his old self again. A minor tranquilizer in appropriate dosage may be used with Norpramin temporarily if anxiety due to depression is present; a phenothiazine may be used similarly if agitation is severe.

Frequently, Norpramin and your own understanding of the patient are all that is necessary.

Norpramin®
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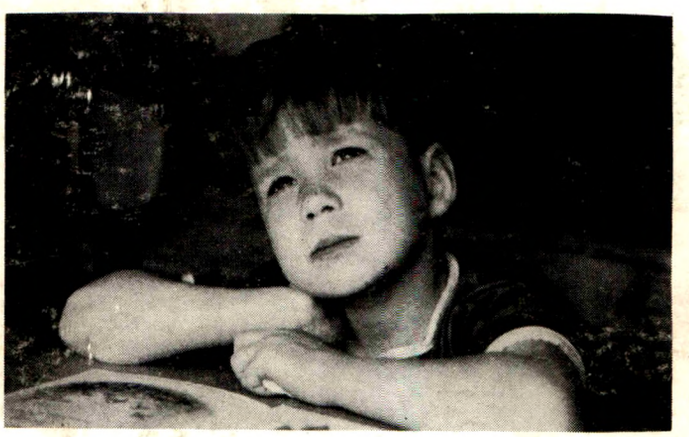
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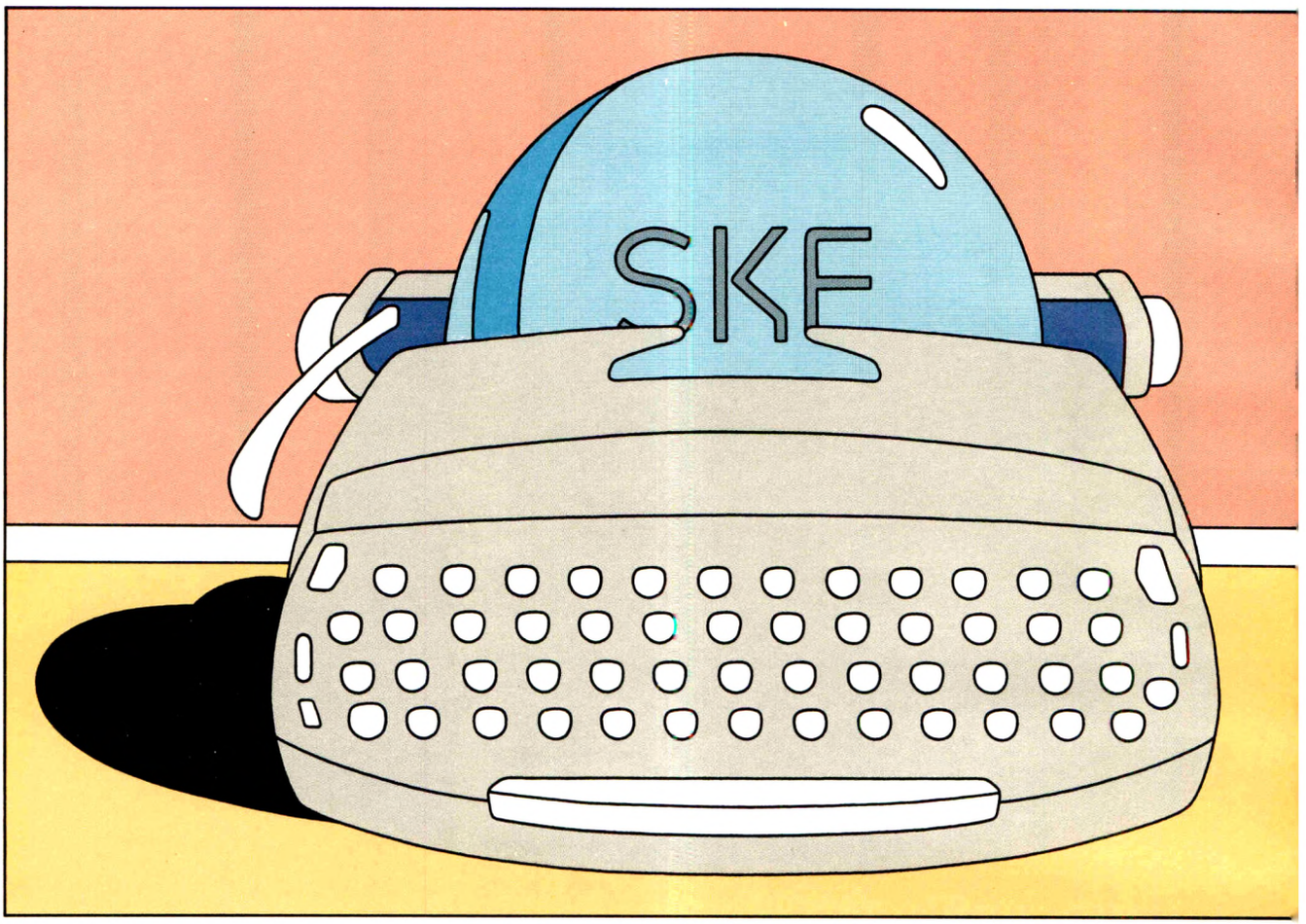
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Subscriptions: U.S. $15.00 per year, Canada and South America $15.75, other foreign $18.00; single issues: $1.75 plus postage.

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Type set by Bru-El Graphic, Inc., 5265 Port Royal Road, Springfield, Va. 22151.

Printed by Dartmouth Printing Co., 69 Lyme Road, Hanover, N.H. 03755.

Second class postage paid at Washington, D.C., and additional mailing offices.

Indexed in *Abstracts for Social Workers, Biological Abstracts, Chemical Abstracts, Cumulative Index to Nursing Literature, Excerpta Medica, Hospital Literature Index, Index Medicus, International Nursing Index, Nutrition Abstracts*, and *Psychological Abstracts*.

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3. Blackwell B, Marley E, Price J, et al: Hypertensive interactions between monoamine oxidase inhibitors and foodstuffs. Br J Psychiatry 113:349–365, 1967
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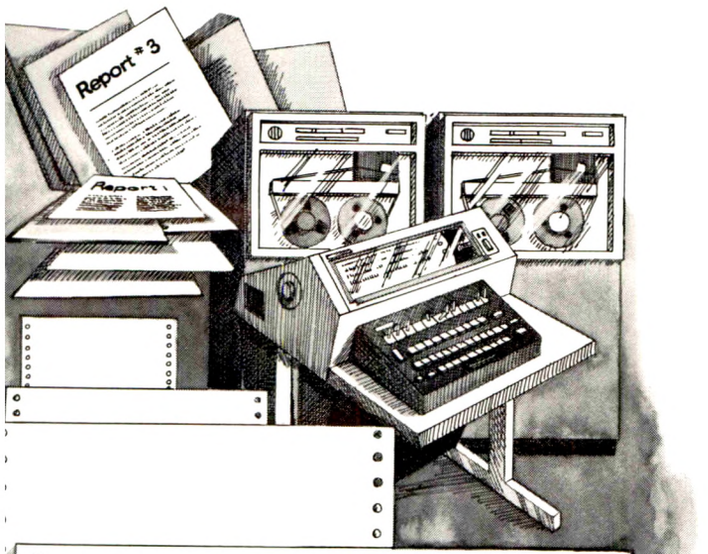
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Issue

of the

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Features

a

Special Section

on

"Schizophrenia"

mirror, mirror on the wall, can this hospitalized schizophrenic relate to herself at all?





If the answer is "yes,"

then she can be helped to relate to others with the adjunctive use of

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brand of
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CONTRAINDICATIONS TRILAFON is contraindicated in drug-associated central nervous system depression (barbiturates, alcohol, narcotics, analgesics, antihistamines). Perphenazine is contraindicated in the presence of existing blood dyscrasias, bone marrow depression and pre-existing liver damage, and in patients who are hypersensitive to perphenazine.

TRILAFON Injection should not be given to patients in coma or severely depressed states.

WARNINGS Usage in pregnancy: Perphenazine should only be given to pregnant patients when, in the judgment of the physician, the potential benefits outweigh the possible risks.

Perphenazine can lower the convulsive threshold in susceptible individuals; it should be used with caution in patients with convulsive disorders. If the patient is being treated with an anticonvulsant agent, increased dosage of that agent may be required when perphenazine is used concomitantly.

Perphenazine should be used with caution in patients with psychic depression.

Perphenazine is not recommended for children under 12 years of age.

Perphenazine may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks, such as driving a car or operat machinery.

PRECAUTIONS As with any potent medication, patients receiving perphenaz should be under medical supervision, particularly if they are receiving h doses. Patients who have had any severe reaction to phenothiazines or to i pramine should be treated cautiously, under close medical supervision.

Although the following adverse reactions have not been reported in patie treated with perphenazine, the possibility that they might occur with TRILA should be considered; blood dyscrasias (pancytopenia, thrombocytopenic purp leukopenia, eosinophilia); liver damage (biliary stasis); narrowing of the vis fields; pigmentation of the retina, cornea, or lens; cerebral edema; polypha photophobia; hyperpyrexia.

If hypotension develops, levarterenol (norepinephrine) can be used, but epinephrine, because epinephrine's action is blocked and partly reversed by p phenazine. Severe, acute hypotension has occurred with the use of phenoth zines and is of particular concern in patients with mitral insufficiency pheochromocytoma.

A significant rise in body temperature may indicate an idiosyncratic react to perphenazine; treatment with perphenazine should be stopped if this occu

The antiemetic effect of perphenazine can obscure signs of toxicity due overdosage of other drugs, or mask the symptoms of disease (eg, brain tumor intestinal obstruction).

Contact dermatitis has been reported with a perphenazine solution; therefo contact of hands or clothing by those handling perphenazine solutions sho be avoided.

POTENTIATION Since phenothiazines can potentiate the central-nervous-syste depressant actions of opiates, antihistamines, barbiturates, and alcohol, I

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Tablets 2,4,8,16 mg. REPETABS® 8 mg.	for maintenance therapy with cooperative patients
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A potent phenothiazine to help:

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a major tranquilizer for in-hospital control and take-home therapy

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he usual dosage of these agents is required when they are administered nitantly with TRILAFON. Patients should be cautioned that their response ohol may be increased while they are being treated with TRILAFON.
nothiazines also potentiate the effects of atropine, heat, and phosphorus icides, and should be used with caution in persons exposed to these agents.

SE REACTIONS *Extrapyramidal reactions:* dystonia including protru- liscoloration, aching and rounding of the tongue; tonic spasm of the mas- ry muscles, tight feeling in the throat, slurred speech, dysphagia, oculogyric trismus, torticollis, retrocollis, muscle weakness, and aching and numb- of the limbs; akathisia; motor restlessness; dyskinesia, parkinsonism; eflexia; and ataxia. The incidence and severity of these reactions usually se with increased dosage, but have occurred in some patients receiving sage. Reduction in dosage or treatment with an antispasmodic agent will control extrapyramidal reactions. In some instances, however, these ns may persist after discontinuation of treatment with perphenazine.
sistent tardive dyskinesia: As with all antipsychotic agents, tardive dys- a may appear in some patients on long-term therapy or may appear after therapy has been discontinued. The risk appears to be greater in elderly ts on high-dose therapy, especially females. The symptoms are persistent some patients appear to be irreversible. The syndrome is characterized by nical involuntary movements of the tongue, face, mouth or jaw (eg, pro- n of tongue, puffing of cheeks, puckering of mouth, chewing movements). imes these may be accompanied by involuntary movements of extremities. is no known effective treatment for tardive dyskinesia; antiparkinsonism usually do not alleviate the symptoms of this syndrome. It is suggested ll antipsychotic agents be discontinued if these symptoms appear. Should necessary to reinstitute treatment, or increase the dosage of the agent, or to a different antipsychotic agent, the syndrome may be masked. It has reported that fine vermicular movements of the tongue may be an early sign of the syndrome and if the medication is stopped at that time the syndrome may not develop.

Allergic reactions: erythema, pruritus, urticaria, eczema, anaphylactoid reactions, and local and generalized edema. In extremely rare instances, individual idiosyncrasy or hypersensitivity to phenothiazines has resulted in cerebral edema, circulatory collapse, and death. Photosensitization, asthma, and exfoliative dermatitis have also occurred in patients treated with phenothiazines.

Autonomic reactions: blurred vision, dry mouth or salivation, nasal congestion, nausea, vomiting, hypertension, tachycardia, hypotension, anorexia, urinary frequency or incontinence, and constipation. Significant autonomic effects have been infrequent in patients receiving less than 24 mg. perphenazine daily.

Other reactions: endocrine disturbances (lactation, gynecomastia, galactorrhea, disturbances in the menstrual cycle), headaches, mild insomnia, altered cerebrospinal fluid proteins, ECG abnormalities, reactivation of psychosis, paradoxical excitement, paranoid-like reactions, catatonia, and systemic lupus erythematosus-like syndrome. Hypnotic effects appear to be minimal, particularly in patients who are permitted to remain active. The following adverse reactions, though rare, have also been reported to be associated with perphenazine treatment: agranulocytosis; jaundice; hyperpigmentation of the skin; grand mal convulsions; failure of ejaculation; hyperglycemia.

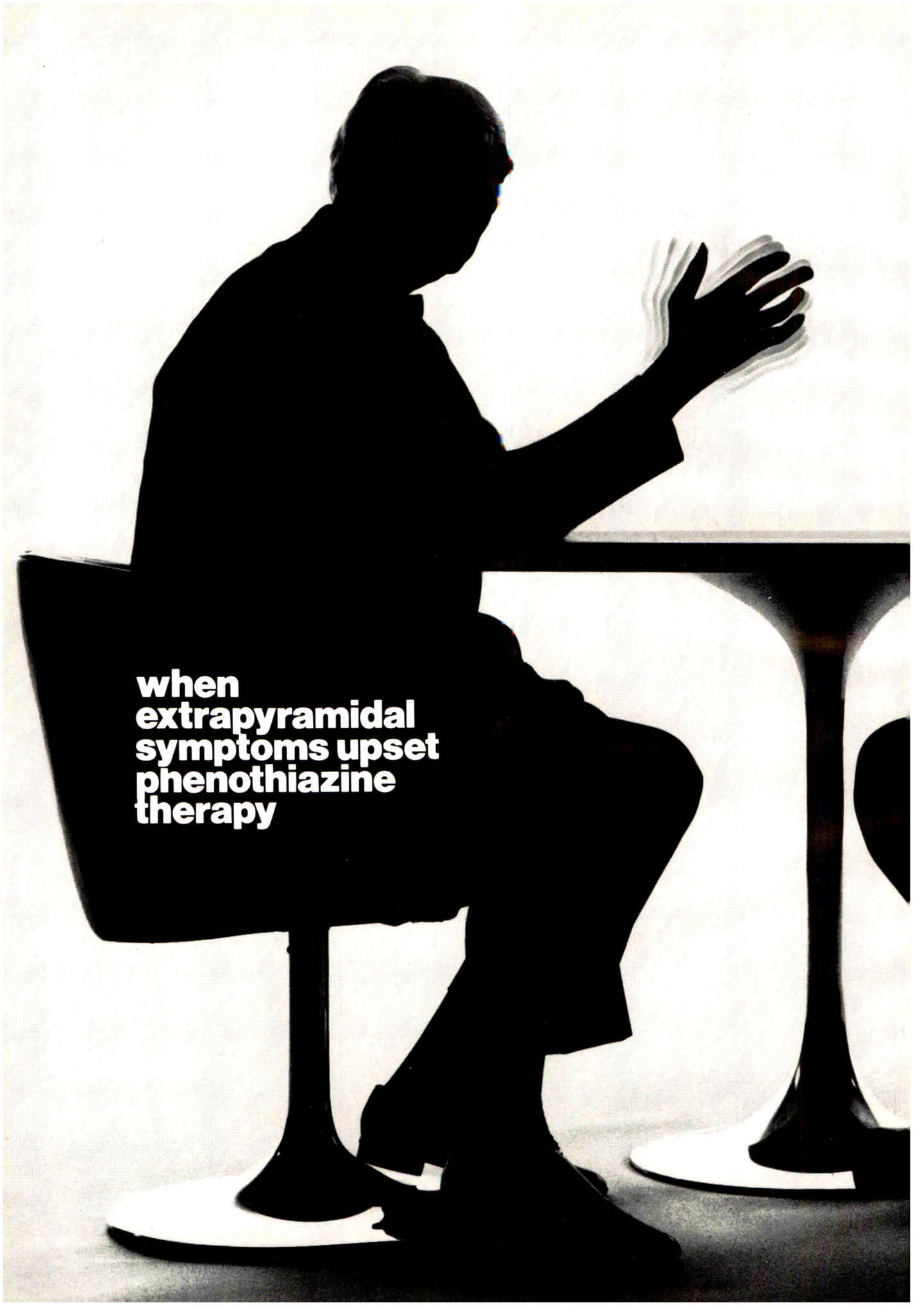
Side effects with intramuscular TRILAFON Injection have been infrequent and transient. Dizziness or significant hypotension after treatment with TRILAFON Injection is a rare occurrence.

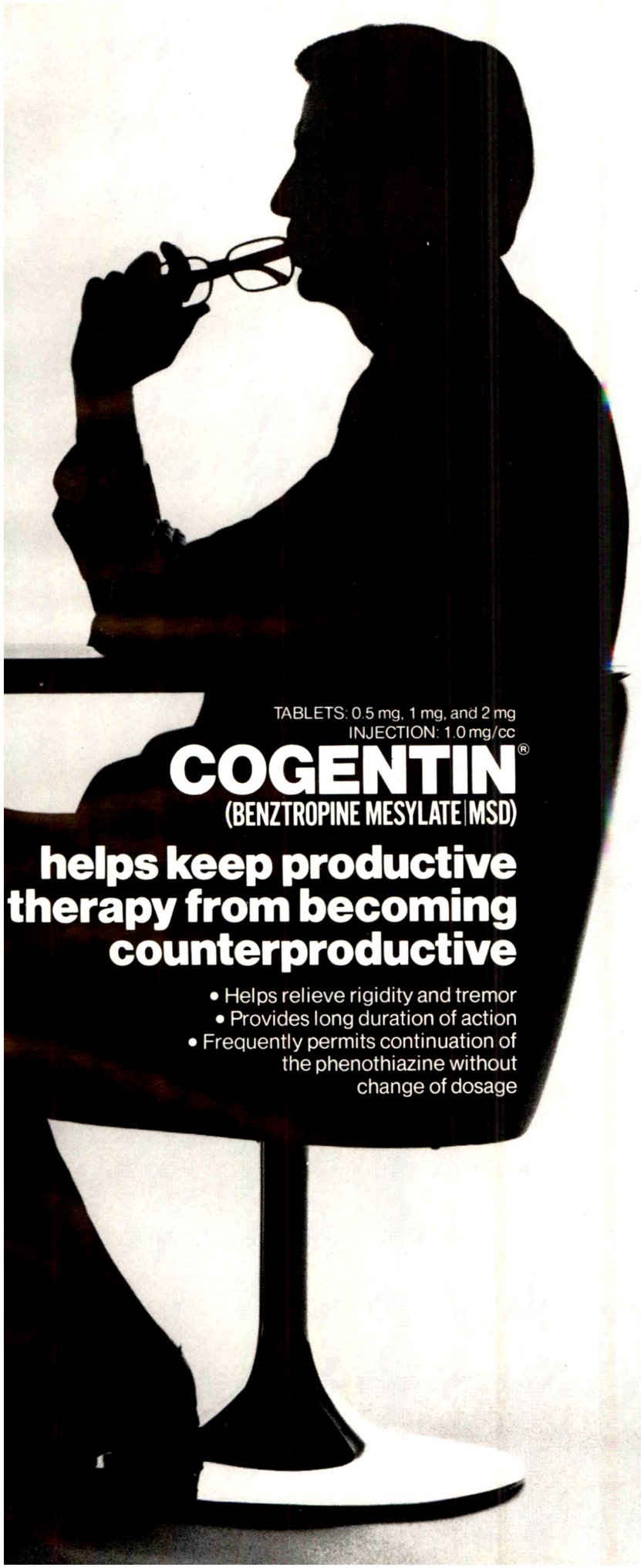
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when
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helps keep productive therapy from becoming counterproductive

- Helps relieve rigidity and tremor
- Provides long duration of action
- Frequently permits continuation of the phenothiazine without change of dosage

Contraindications: Children under three years of age; use cautiously in older children.

Warnings: Safe use in pregnancy not established. May impair mental and/or physical abilities required for performance of hazardous tasks, such as operating machinery or driving a motor vehicle.

Precautions: Because of cumulative action, continued supervision is advisable. Closely observe patients with tendencies to tachycardia or hypotension and those with prostatic hypertrophy. Dysuria may occur, but rarely becomes a problem. Large doses may cause complaints of weakness and inability to move particular muscle groups, requiring dosage adjustment.
Mental confusion and excitement may occur with large doses, or in susceptible patients; visual hallucinations reported occasionally. May intensify mental symptoms when used to treat extrapyramidal disorders due to CNS drugs, such as reserpine and phenothiazines, in patients with mental disorders; in such patients, increased doses of antiparkinsonian drugs can precipitate toxic psychosis; observe patients carefully, especially at the beginning of treatment or if dosage is increased. Masking action on possible development of permanent extrapyramidal symptoms with prolonged phenothiazine therapy has not been investigated. Patients with a poor mental outlook are usually poor candidates for therapy.
May produce anhidrosis; give with caution during hot weather, especially to the old, the chronically ill, the alcoholic, those who have central nervous system disease, those who do manual labor in a hot environment, and those with disturbances in sweating. If anhidrosis appears, reduce dosage so that ability to maintain body heat equilibrium is not impaired. Occurrence of glaucoma is a possibility; probably should not be used in angle-closure glaucoma.
Large doses generally cannot be tolerated by older patients, thin patients, or patients with arteriosclerotic parkinsonism. Do not terminate other antiparkinsonism agents abruptly; reduce gradually. In drug-induced parkinsonism, closely observe patients for severe reactions, and temporarily discontinue COGENTIN (Benztropine Mesylate, MSD) if they appear; do not extend therapy longer than necessary to counteract the extrapyramidal disorders; although the psychotropic drug frequently can be continued without change of dosage, a decrease might be indicated.

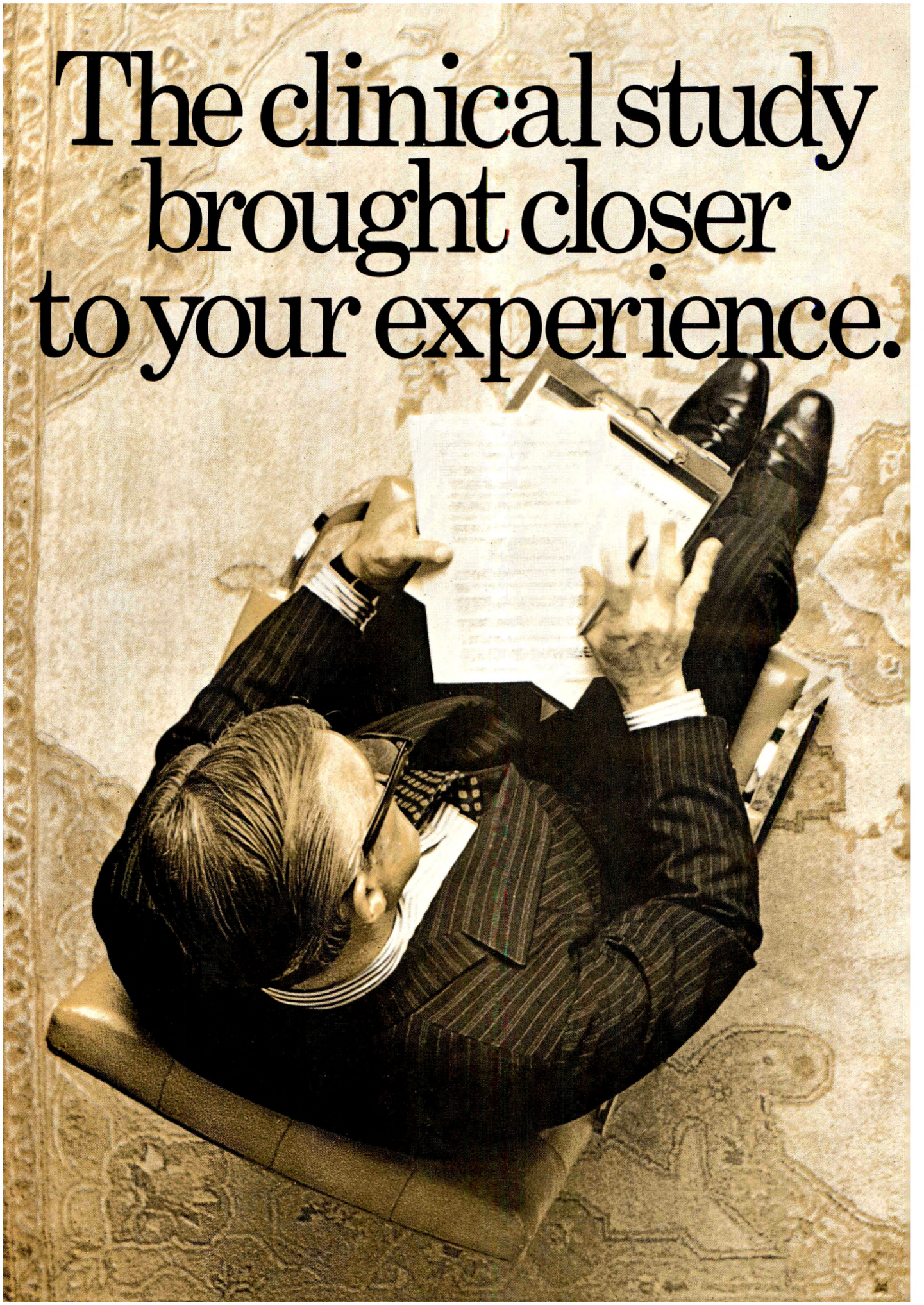
Adverse Reactions: Adverse reactions may be anticholinergic and/or antihistaminic. Dry mouth, blurred vision, nausea, nervousness may develop. If dry mouth causes difficulty in swallowing or speaking, or loss of appetite and weight, reduce dosage, or discontinue drug temporarily. Vomiting occurs infrequently and may be controlled by temporary discontinuation, followed by resumption at a lower dosage. Constipation, numbness of the fingers, listlessness, and depression may develop. Occasionally, an allergic reaction, e.g., skin rash, develops; sometimes this can be controlled by reducing dosage, but occasionally requires discontinuation.

Supplied: Tablets in three strengths: 0.5 mg and 1 mg benztropine mesylate, in bottles of 100, and 2 mg benztropine mesylate, in bottles of 100 and 1000. Injection, containing 1.0 mg benztropine mesylate and 9.0 mg sodium chloride per cc, in 2-cc ampuls.

For more detailed information, consult your MSD representative or see the Direction Circular. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

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Results of a "small scale" study of Valium®(diazepam) and placebo*

Six patients (3 men and 3 women) with prominent, persistent, high levels of anxiety (Taylor Manifest Anxiety Scale scores above 25) received Valium (diazepam) and placebo under double-blind conditions for six treatment periods of three days each, with a drug-free day between periods. Two dosage levels of Valium, 5 mg and 10 mg *t.i.d.*, and placebo were each administered for two periods.

Three methods of rating were employed in this study: physician's rating of symptoms, patient's self-rating, and patient's drug preference. Each patient's three main target symptoms were identified and rated by the physician initially and after each visit. Valium, at both dosage levels, gave higher physician ratings of symptom improvement than placebo, although the changes did not reach statistical significance. The six patients rated their own symptoms in order of severity at the initial interview and graded them daily as to the degree of improvement. In the patients' self-rating changes, both dosage levels of Valium gave higher ratings of improvement than placebo. Also, patients' preference recorded at the end of each week of the trial revealed that Valium (both dosage levels) was preferred over placebo to a significant degree.

"Small scale" drug trials use methods of observation and patient management similar to those you use in your practice.

The physician-investigator assessed Valium (diazepam) just as you might. He treated a small number of persistently anxious patients. He saw them frequently, supporting them, and rated changes in symptoms and had his patients do likewise. He noted the patient's preference for one medication over another. He found that Valium was effective, just as others have in larger, conventional studies, and just as you can find in your practice.

If you have not prescribed Valium, select a few overly anxious, psychoneurotic patients with or without associated or secondary depressive symptoms, and give Valium a trial of your own. You'll find it can significantly reduce anxiety and thus may facilitate psychotherapy and make patients more comfortable. Caution patients on Valium against driving or operating machinery. Side effects most commonly reported have been drowsiness, fatigue and ataxia.

*McLeod, W. R.; Mowbray, R. M., and Davies, B.: Scientific exhibit presented at the Interstate Postgraduate Medical Association of North America, Nov. 15-18, 1971, New Orleans, La.

Valium®(diazepam)
2-mg, 5-mg and 10-mg tablets

Please see the following page for a summary of product information.

Valium® (diazepam)
For overanxious, tense psychoneurotics with or without associated or secondary depressive symptoms



Effectiveness—Valium (diazepam) can relieve tension-induced symptoms—psychic and somatic—in patients thus overreacting to situational stresses as well as in patients with psychoneuroses.

Excellent tolerance—Valium (diazepam) tablets generally do not significantly affect respiration, pulse or heart rate on recommended dosage. The most frequent side effects are drowsiness, ataxia and fatigue. Caution patient against driving or operating dangerous machinery while on Valium.

Titratable dosage—With Valium, small adjustments in dosage can significantly alter the clinical response. This titratability enables you to tailor your prescriptions for maximum efficiency. There are three tablet strengths from which to choose: 2 mg, 5 mg and 10 mg.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg; bottles of 100 and 500. All strengths also available in Tel-E-Dose® packages of 1000.

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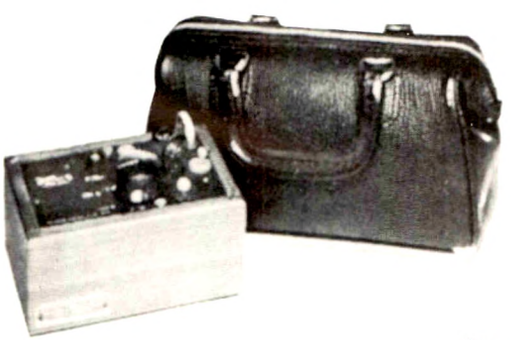
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Also built-in on request, an **automatic switch** for quicker build up to therapeutic ranges of Sedac.

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She just doesn't respond to things. No interest. No energy. Discouraged.

It may be mild depression. She needs help...and she needs it now.

Counsel and reassurance may suffice. But if you decide supportive medication is indicated, Ritalin can offer prompt benefit.

Ritalin usually begins to act with the very first dose...boosts spirits and brightens mood...helps the patient get moving again. And Ritalin is generally well tolerated, even by older and convalescent patients. However, Ritalin should not be used for severe depression.

When Ritalin works, one prescription may be enough... to help provide an answer to mild depression.

Ritalin®
(methylphenidate)
helps the patient respond in mild depression*

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methylphenidate hydrochloride)
TABLETS

INDICATION
Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, FDA has classified the indication as follows:
"Possibly" effective: Mild depression
Final classification of the less-than-effective indications requires further investigation.

CONTRAINDICATIONS
Marked anxiety, tension, and agitation, since Ritalin may aggravate these symptoms. Also contraindicated in patients known to be hypersensitive to the drug and in patients with glaucoma.

WARNINGS
Ritalin is not recommended for children under six years, since safety and efficacy in this age group have not been established. Since sufficient data on safety and efficacy of long-term use of Ritalin in children with minimal brain dysfunction are not yet available, those requiring long-term therapy should be carefully monitored.
Ritalin should not be used for severe depression of either exogenous or endogenous origin or for the prevention of normal fatigue states.
Ritalin may lower the convulsive threshold in patients with or without prior seizures; with or without prior EEG abnormalities, even in absence of seizures. Safe concomitant use of anticonvulsants and Ritalin has not been established. If seizures occur, Ritalin should be discontinued.
Use cautiously in patients with hypertension.

Drug Interactions
Ritalin may decrease the hypotensive effect of guanethidine. Use cautiously with pressor agents and MAO inhibitors. Ritalin may inhibit the metabolism of coumarin anticoagulants, anticonvulsants (phenobarbital, diphenylhydantoin, primidone), phenylbutazone, and tricyclic antidepressants (imipramine, desipramine). Downward dosage adjustments of these drugs may be required when given concomitantly with Ritalin.

Usage in Pregnancy
Adequate animal reproduction studies to establish safe use of Ritalin during pregnancy have not been conducted. Therefore, until more information is available, Ritalin should not be prescribed for women of childbearing age unless, in the opinion of the physician, the potential benefits outweigh the possible risks.

Drug Dependence
Ritalin should be given cautiously to emotionally unstable patients, such as those with a history of drug dependence or alcoholism, because such patients may increase dosage on their own initiative.
Chronically abusive use can lead to marked tolerance and psychic dependence with varying degrees of abnormal behavior. Frank psychotic episodes can occur, especially with parenteral abuse. Careful supervision is required during drug withdrawal, since severe depression as well as the effects of chronic overactivity can be unmasked. Long-term follow-up may be required because of the patient's basic personality disturbances.

PRECAUTIONS
Patients with an element of agitation may react adversely; discontinue therapy if necessary.
Periodic CBC and platelet counts are advised during prolonged therapy.

ADVERSE REACTIONS
Nervousness and insomnia are the most common adverse reactions but are usually controlled by reducing dosage and omitting the drug in the afternoon or evening.
Other reactions include: hypersensitivity (including skin rash, urticaria, fever, arthralgia, exfoliative dermatitis, and erythema multiforme with histopathological findings of necrotizing vasculitis); anorexia; nausea; dizziness; palpitations; headache; dyskinesia; drowsiness; blood pressure and pulse changes, both up and down; tachycardia; angina; cardiac arrhythmias; abdominal pain; weight loss during prolonged therapy. In children, loss of appetite, abdominal pain, weight loss during prolonged therapy, insomnia, and tachycardia may occur more frequently. Toxic psychosis has been reported.

DOSAGE AND ADMINISTRATION
Adults
Administer orally in divided doses 2 or 3 times daily, preferably 30 to 45 minutes before meals. Dosage will depend upon indication and individual response.
Average dosage is 20 to 30 mg daily. Some patients may require 40 to 60 mg daily. In others, 10 to 15 mg daily will be adequate. The few patients who are unable to sleep if medication is taken late in the day should take the last dose before 6 p.m.

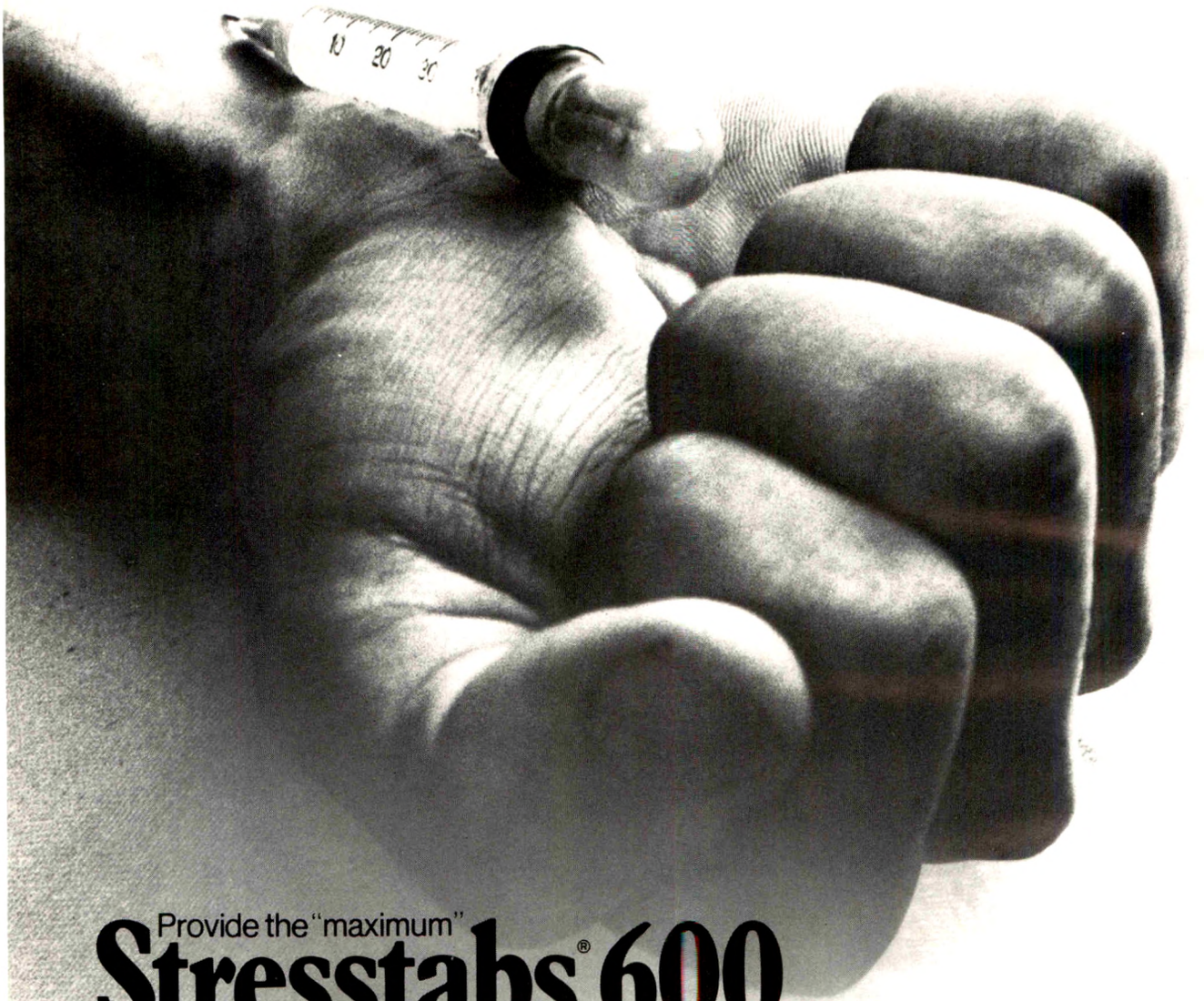
HOW SUPPLIED
Tablets, 20 mg (peach, scored); bottles of 100 and 1000.
Tablets, 10 mg (pale green, scored); bottles of 100, 500, 1000 and Strip Dispensers of 100.
Tablets, 5 mg (pale yellow); bottles of 100, 500, and 1000.
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This drug has been evaluated as possibly effective for this indication. See brief prescribing information.

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Niacinamide (as Niacinamide Ascorbate)	100 mg (10 MDR)
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Calcium Pantothenate USP	20 mg

MDR—Adult Minimum Daily Requirement. Recommended Intake: Adults, 1 tablet daily or as directed by physician. Supplied: Bottles of 60 and 500.

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(thiothixene) (thiothixene hydrochloride)

Capsules 1 mg., 2 mg., 5 mg., 10 mg. Concentrate 5 mg./cc., Intramuscular 2 mg./cc.

to help control psychotic behavior

For prescribing information, including adverse reactions and contraindications, please see following page of this advertisement.

Navane® (thiothixene) (thiothixene hydrochloride)

Capsules: 1 mg., 2 mg., 5 mg., 10 mg.
Concentrate: 5 mg./cc.
Intramuscular: 2 mg./cc.

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Navane® (thiothixene)
Capsules 1 mg., 2 mg., 5 mg., 10 mg.
(thiothixene hydrochloride)
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Actions. Navane is a psychotropic agent of the thioxanthene series. Navane possesses certain chemical and pharmacological similarities to the piperazine phenothiazines and differences from the aliphatic group of phenothiazines. Navane's mode of action has not been clearly established.

Indications. Navane is effective in the management of manifestations of psychotic disorders.

Contraindications. Navane is contraindicated in patients with circulatory collapse, comatose states, central nervous system depression due to any cause, and blood dyscrasias. Navane is contraindicated in individuals who have shown hypersensitivity to the drug. It is not known whether there is a cross-sensitivity between the thioxanthenes and the phenothiazine derivatives, but this possibility should be considered.

Warnings. *Usage in Pregnancy* – Safe use of Navane during pregnancy has not been established. Therefore, this drug should be given to pregnant patients only when, in the judgment of the physician, the expected benefits from the treatment exceed the possible risks to mother and fetus. Animal reproduction studies and clinical experience to date have not demonstrated any teratogenic effects.

In the animal reproduction studies with Navane (thiothixene), there was some decrease in conception rate and litter size, and an increase in resorption rate in rats and rabbits, changes which have been similarly reported with other psychotropic agents. After repeated oral administration to rats (5 to 15 mg./kg./day), rabbits (3 to 50 mg./kg./day), and monkeys (1 to 3 mg./kg./day) before and during gestation, no teratogenic effects were seen. (See Precautions.)

Usage in children—The use of Navane in children under 12 years of age is not recommended because safety and efficacy in the pediatric age group have not been established.

As is true with many CNS drugs, Navane may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks such as driving a car or operating machinery, especially during the first few days of therapy. Therefore, the patient should be cautioned accordingly.

As in the case of other CNS-acting drugs, patients receiving Navane should be cautioned about the possible additive effects (which may include hypotension) with CNS depressants and with alcohol.

Precautions. An antiemetic effect was observed in animal studies with Navane; since this effect may also occur in man, it is possible that Navane (thiothixene) may mask signs of overdosage of toxic drugs and may obscure conditions such as intestinal obstruction and brain tumor.

In consideration of the known capability of Navane and certain other psychotropic drugs to precipitate convulsions, extreme caution should be used in patients with a history of convulsive disorders or those in a state of alcohol withdrawal since it may lower the convulsive threshold. Although Navane potentiates the actions of the barbiturates, the dosage of the anticonvulsant therapy should not be reduced when Navane is administered concurrently.

Caution as well as careful adjustment of the dosage is indicated when Navane is used in conjunction with other CNS depressants other than anticonvulsant drugs.

Though exhibiting rather weak anticholinergic properties, Navane should be used with caution in patients who are known or suspected to have glaucoma, or who might be exposed to extreme heat, or who are receiving atropine or related drugs.

Use with caution in patients with cardiovascular disease.

Also, careful observation should be made for pigmentary retinopathy and lenticular pigmentation (fine lenticular pigmentation has been noted in a small number of patients treated with Navane [thiothixene] for prolonged periods). Blood dyscrasias (agranulocytosis, pancytopenia, thrombocytopenic purpura), and liver damage (jaundice, biliary stasis), have been reported with related drugs.

Undue exposure to sunlight should be avoided. Photosensitive reactions have been reported in patients on Navane.

Intramuscular Administration – As with all intramuscular preparations, Navane (thiothixene hydrochloride) Intramuscular should be injected well within the body of a relatively large muscle. The preferred sites are the upper outer quadrant of the buttock (i.e., gluteus maximus) and the midlateral thigh.

The deltoid area should be used only if well developed such as in certain adults and older children, and then only with caution to avoid radial nerve injury. Intramuscular injections should not be made into the lower- and mid-thirds of the upper arm. As with all intramuscular injections, aspiration is necessary to help avoid inadvertent injection into a blood vessel.

Adverse Reactions. *Note:* Not all of the following reactions have been reported with Navane. However, since Navane has certain chemical and pharmacologic similarities to the phenothiazines, all of the known side effects and toxicity associated with phenothiazine therapy should be borne in mind when Navane (thiothixene) is used.

Cardiovascular effects: Tachycardia, hypotension, lightheadedness and syncope. In the event hypotension occurs, epinephrine should not be used as a pressor agent since a paradoxical further lowering of blood pressure may result. Nonspecific EKG changes have been observed in some patients receiving Navane. These changes are usually reversible and frequently disappear on continued Navane therapy. The clinical significance of these changes is not known.

CNS effects: Drowsiness, usually mild, may occur, although it usually subsides with continuation of Navane therapy. The incidence of sedation appears to be similar to that of the piperazine group of phenothiazines, but less than that of certain aliphatic phenothiazines. Restlessness, agitation and insomnia have been noted with Navane. Seizures and paradoxical exacerbation of psychotic symptoms have occurred with Navane infrequently.

Hyperreflexia has been reported in infants delivered from mothers having received structurally related drugs.

In addition, phenothiazine derivatives have been associated with cerebral edema and cerebrospinal fluid abnormalities.

Extrapyramidal symptoms, such as pseudoparkinsonism, akathisia, and dystonia have been reported. Management of these extrapyramidal symptoms depends upon the type and severity. Rapid relief of acute symptoms may require the use of an injectable antiparkinson agent. More slowly emerging symptoms may be managed by reducing the dosage of Navane and/or administering an oral antiparkinson agent.

Persistent Tardive Dyskinesia: Although not reported with Navane, certain antipsychotic agents have been associated with persistent dyskinesias. Tardive dyskinesia may appear in some patients on long term therapy or may occur after drug therapy has been discontinued. The risk seems to be greater in elderly patients on high dose therapy, especially females. The symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movements of the tongue, face, mouth or jaw (e.g., protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Sometimes these may be accompanied by involuntary movements of extremities.

There is no known effective treatment for tardive dyskinesia; antiparkinsonism agents usually do not alleviate the symptoms of this syndrome. It is suggested that all antipsychotic agents be discontinued if these symptoms appear.

Should it be necessary to reinstitute treatment, or increase the dosage of the agent, or switch to a different antipsychotic agent, the syndrome may be masked.

It has been reported that fine vermicular movements of the tongue may be an early sign of the syndrome and if the medication is stopped at that time, the syndrome may not develop.

Hepatic effects: Elevations of serum transaminase and alkaline phosphatase, usually transient, have been infrequently observed in some patients. No clinically confirmed cases of jaundice attributable to Navane (thiothixene) have been reported.

Hematologic effects: As is true with certain other psychotropic drugs, leukopenia and leucocytosis, which are usually transient, can occur occasionally with Navane. Other antipsychotic drugs have been associated with agranulocytosis, eosinophilia, hemolytic anemia, thrombocytopenia and pancytopenia.

Allergic reactions: Rash, pruritus, urticaria, photosensitivity and rare cases of anaphylaxis have been reported with Navane. Although not experienced with Navane, exfoliative dermatitis and contact dermatitis (in nursing personnel) have been reported with certain phenothiazines.

Endocrine disorders: Lactation, moderate breast enlargement and amenorrhea have occurred in a small percentage of females receiving Navane. If persistent, this may necessitate a reduction in dosage or the discontinuation of therapy. Phenothiazines have been associated with false positive pregnancy tests, gynecomastia, hypoglycemia, hyperglycemia, and glycosuria.

Autonomic effects: Dry mouth, blurred vision, nasal congestion, constipation, increased sweating, increased salivation, and impotence have occurred infrequently with Navane therapy. Phenothiazines have been associated with miosis, mydriasis, and adynamic ileus.

Other adverse reactions: Hyperpyrexia, anorexia, nausea, vomiting, diarrhea, increase in appetite and weight, weakness or fatigue, polydipsia and peripheral edema.

NOTE: Sudden deaths have occasionally been reported in patients who have received certain phenothiazine derivatives. In some cases the cause of death was apparently cardiac arrest or asphyxia due to failure of the cough reflex. In others, the cause could not be determined nor could it be established that death was due to phenothiazine administration because safe conditions for its use have not been established.

Dosage and Administration. Dosage of Navane should be individually adjusted depending on the chronicity and severity of the condition. In general, small doses should be used initially and gradually increased to the optimal effective level, based on patient response.

Usage in children under 12 years of age is not recommended.

Navane Intramuscular Solution—For Intramuscular Use Only. Where more rapid control and treatment of behavior is desirable, the intramuscular form of Navane (thiothixene hydrochloride) may be indicated. It is also of benefit where the very nature of the patient's symptomatology, whether acute or chronic, renders oral administration impractical or even impossible.

For treatment of acute symptomatology or in patients unable or unwilling to take oral medication, the usual dose is 4 mg. of Navane Intramuscular administered 2 to 4 times daily. Dosage may be increased or decreased depending on response. Most patients are controlled on a total daily dosage of 16 to 20 mg. The maximum recommended dosage is 30 mg./day. An oral form should supplant the injectable form as soon as possible. It may be necessary to adjust the dosage when changing from the intramuscular to oral dosage forms. Dosage recommendations for Navane Capsules and Concentrate appear in the following paragraphs.

Navane Capsules; Navane Concentrate—In milder conditions, an initial dose of 2 mg. three times daily. If indicated, a subsequent increase to 15 mg./day total daily dose is often effective.

In more severe conditions, an initial dose of 5 mg. twice daily.

The usual optimal dose is 20 to 30 mg. daily. If indicated, an increase to 60 mg./day total daily dose is often effective. Exceeding a total daily dose of 60 mg. rarely increases the beneficial response.

Some patients have been successfully maintained on once-a-day Navane (thiothixene) therapy.

Overdosage. Manifestations include muscular twitching, drowsiness, and dizziness. Symptoms of gross overdosage may include CNS depression, rigidity, weakness, torticollis, tremor, salivation, dysphagia, hypotension, disturbances of gait, or coma.

Treatment: Essentially symptomatic and supportive. For Navane oral, early gastric lavage is helpful. For Navane oral and intramuscular, keep patient under careful observation and maintain an open airway, since involvement of the extrapyramidal system may produce dysphagia and respiratory difficulty in severe overdosage. If hypotension occurs, the standard measures for managing circulatory shock should be used (I.V. fluids and/or vasoconstrictors).

If a vasoconstrictor is needed, levarterenol and phenylephrine are the most suitable drugs. Other pressor agents, including epinephrine, are not recommended, since phenothiazine derivatives may reverse the usual pressor action of these agents and cause further lowering of blood pressure.

If CNS depression is present, recommended stimulants include amphetamine, dextroamphetamine, or caffeine and sodium benzoate. Picrotoxin or pentylenetetrazol should be avoided. Extrapyramidal symptoms may be treated with antiparkinson drugs.

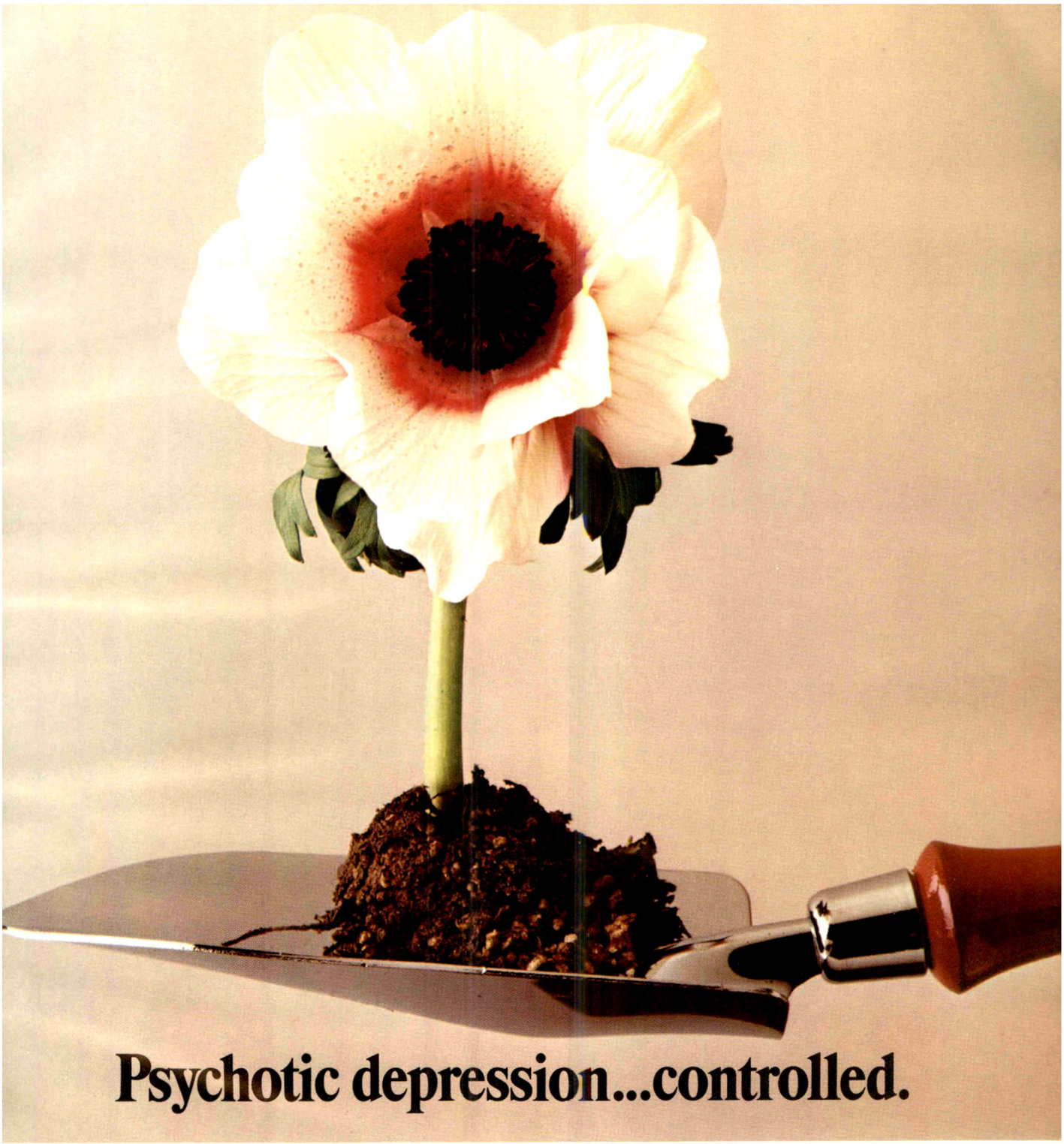
There are no data on the use of peritoneal or hemodialysis, but they are known to be of little value in phenothiazine intoxication.

How Supplied. Navane (thiothixene) is available as capsules containing 1 mg., 2 mg., 5 mg., and 10 mg. in bottles of 100 and 1,000.

Navane (thiothixene hydrochloride) Concentrate is available in 120 cc. (4 oz.) bottles with an accompanying dropper calibrated at 2 mg., 4 mg., 5 mg., 6 mg., 8 mg. and 10 mg. Each cc. contains thiothixene hydrochloride equivalent to 5 mg. of thiothixene. Contains alcohol, U.S.P. 7.0% v/v. (small loss unavoidable).

Navane (thiothixene hydrochloride) Intramuscular Solution is available in a 2 cc. amber glass vial in packages of 10. Each cc. contains thiothixene hydrochloride equivalent to 2 mg. of thiothixene, dextrose 5% w/v, benzyl alcohol 0.9% w/v.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017



Psychotic depression...controlled.

Navane (thiothixene) helps reduce the intensity and frequency of depression as manifested in psychotic disorders. Mental and motor retardation may be replaced by an increasing interest in self and environment and a return to productive activity. Severe mood disorders may be relieved to encourage cooperation with therapy and daily routine. Navane...an effective anti-psychotic.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

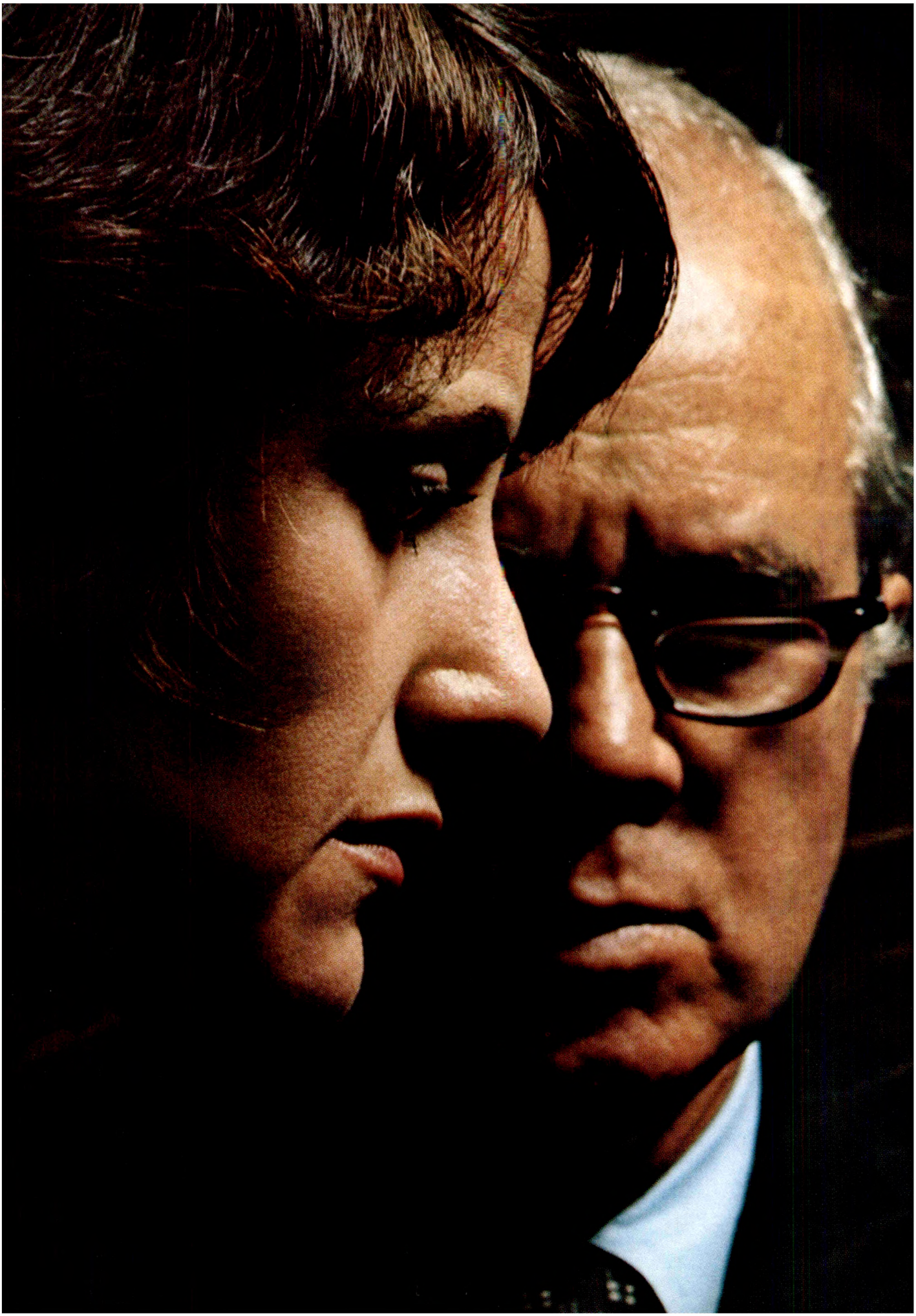
Navane®

(thiothixene) (thiothixene hydrochloride)

Capsules 1 mg., 2 mg., 5 mg., 10 mg. Concentrate 5 mg./cc., Intramuscular 2 mg./cc.

to help control psychotic depression

For prescribing information, including adverse reactions and contraindications, please see facing page of this advertisement.



The TRIAVIL® Potential in the management of moderate to severe anxiety with depression

When time and talk are not enough...
The therapist is the primary catalyst for change in the psychotherapeutic relationship. However, when patients suffer from moderate to severe anxiety with depression, there are situations when TRIAVIL can often be a useful adjunct.

...TRIAVIL may help
There are three important benefits you may expect when TRIAVIL is part of the treatment program: (1) When symptoms of moderate to severe anxiety or agitation with depression are relieved, the patient may become more accessible and cooperative. (2) As somatic manifestations are controlled, attention may be focused on underlying causative factors. (3) Symptomatic relief may enable the patient to function more effectively in his daily life while your work with the patient progresses.

Since it is simpler to remember to take one tablet rather than several (particularly in multiple daily doses), your patients on TRIAVIL will be more likely to take proper doses of the medication. And, of course, economy is an added factor in therapy with TRIAVIL.

Tablets TRIAVIL are available in four different combinations affording flexibility and individualized dosage adjustment. Close supervision of patients is essential until satisfactory remission has taken place. Suicide is inherent in any depressive illness so patients should not have easy access to large quantities of the drug. The drug may impair alertness and potentiate the response to alcohol. It should not be used during the acute recovery phase following myocardial infarction or given to patients who have received an MAOI within two weeks. TRIAVIL should be used with caution in glaucoma and in patients prone to urinary retention. It is contraindicated in CNS depression and in the presence of evidence of bone marrow depression.

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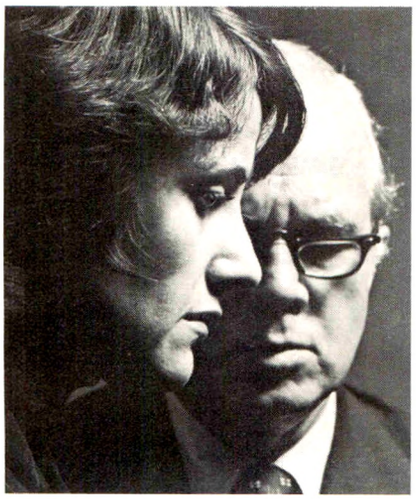
For a brief summary of prescribing information, please turn to the following page.

when patients exhibit moderate to marked anxiety or agitation with symptoms of depression

TRIAVIL® (containing perphenazine and amitriptyline HCl)

an antidepressant tranquilizer

when patients exhibit moderate to marked anxiety
or agitation with symptoms of depression



TRIAVIL® 4-25

Each tablet contains
4 mg. perphenazine and
25 mg. amitriptyline HCl

a formulation particularly suited to psychiatric practice
when higher doses are required.

Also Available:
TRIAVIL® 2-25: Each tablet contains
2 mg. perphenazine and 25 mg. amitriptyline HCl.

TRIAVIL® 2-10: Each tablet contains
2 mg. perphenazine and 10 mg. amitriptyline HCl.

TRIAVIL® 4-10: Each tablet contains
4 mg. perphenazine and 10 mg. amitriptyline HCl.

INITIAL THERAPY FOR MANY PATIENTS
TRIAVIL® 2-25 (or TRIAVIL® 4-25) t.i.d. or q.i.d.

FOR FLEXIBILITY IN ADJUSTING MAINTENANCE THERAPY
TRIAVIL® 2-10 (or TRIAVIL® 4-10)

CONTRAINDICATIONS: Central nervous system depression from drugs (barbiturates, narcotics, analgesics, antihistamines) and alcohol; bone marrow depression; pregnancy; known hypersensitivity to phenothiazines or amitriptyline. Do not give concomitantly with MAOI drugs because hyperpyretic crises, severe convulsions, and deaths have occurred from such combinations. Allow minimum of 14 days between therapies, then initiate therapy with TRIAVIL cautiously, with gradual increase in dosage until optimum response is achieved. Not recommended for use during acute recovery phase following myocardial infarction. Not recommended in children.

WARNINGS: TRIAVIL should not be given with guanethidine or similarly acting compounds. Use cautiously in patients with history of urinary retention, narrow-angle glaucoma, increased ocular pressure, or convulsive disorders. Patients with cardiovascular disorders should be watched closely. Tricyclic antidepressants, including amitriptyline HCl, particularly in high doses, have been reported to produce arrhythmias, sinus tachycardia, and prolongation of conduction time. Myocardial infarction and stroke have been reported with tricyclic antidepressant drugs. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. Caution patients performing hazardous tasks, such as operating machinery or driving motor vehicles, that drug may impair mental and/or physical abilities.

PRECAUTIONS: Suicide is a possibility in depressed patients and may remain until significant remission occurs. Such patients should not have access to large quantities of this drug.
Perphenazine: Should not be used indiscriminately. Use with caution in patients who have previously exhibited severe adverse reactions to other phenothiazines. Likelihood of untoward actions is greater with high doses. Closely supervise with any dosage.
The antiemetic effect of perphenazine may obscure signs of toxicity due to overdosage of other drugs or make more difficult the diagnosis of disorders such as brain tumor or intestinal obstruction.
A significant, not otherwise explained, rise in body temperature may suggest individual intolerance to perphenazine, in which case discontinue.
If hypotension develops, epinephrine should not be employed, as its action is blocked and partially reversed by perphenazine.
Phenothiazines may potentiate the action of central nervous system depressants (opiates, analgesics, antihistamines, barbiturates, alcohol) and atropine. In concurrent therapy with any of these, TRIAVIL should be given in reduced dosage. May also potentiate the action of heat and phosphorous insecticides.
Amitriptyline: In manic-depressive psychosis, depressed patients may experience a shift toward the manic phase if they are treated with an antidepressant drug. Patients with paranoid symptomatology may have an exaggeration of such symptoms.
The tranquilizing effect of TRIAVIL has seemed to reduce the likelihood of this effect.
Supervise closely and carefully adjust dosage when given with anticholinergic agents and sympathomimetic drugs.
The drug may enhance the response to alcohol and the effects of barbiturates and other CNS depressants.
Concurrent administration of amitriptyline HCl and electroshock therapy may increase the hazards of therapy. Such treatment should be limited to patients for whom it is essential.
Discontinue several days before elective surgery if possible.
Elevation and lowering of blood sugar levels have both been reported.

ADVERSE REACTIONS: Similar to those reported with either constituent alone.
Perphenazine: Side effects may be any of those reported with phenothiazine drugs: extrapyramidal symptoms (opisthotonos, oculogyric crises, hyperreflexia, dystonia, akathisia, dyskinesia, parkinsonism) usually controlled by the concomitant use of effective antiparkinsonian drugs and/or by reduction in dosage, but sometimes persist after discontinuation of the phenothiazine; skin disorders (photosensitivity, itching, erythema, urticaria, eczema, up to exfoliative dermatitis); other allergic reactions (asthma, laryngeal edema, angioneurotic edema, anaphylactoid reaction); peripheral edema; reversed epinephrine effect; hyperglycemia; endocrine disturbances (lactation, galac-

orrhea, disturbances of menstrual cycle); altered cerebrospinal luid proteins; paradoxical excitement; ECG abnormalities quinidine-like effect); reactivation of psychotic processes; catatonic-like states; autonomic reactions, such as dryness of he mouth, headache, nausea, vomiting, constipation, obstipaion, urinary frequency, blurred vision, nasal congestion, and a change in pulse rate; hypnotic effects; pigmentary retinopathy; corneal and lenticular pigmentation; occasional lassitude; muscle weakness; mild insomnia. Other adverse reactions reported with various phenothiazine compounds include blood dyscrasias (pancytopenia, thrombocytopenic purpura, leukopenia, agranulocytosis, eosinophilia); liver damage (jaundice, biliary stasis); grand mal convulsions; cerebral edema; polyphagia; photophobia; skin pigmentation; and failure of ejaculation.

Amitriptyline: Note: Listing includes a few reactions not reported for this drug, but which have occurred with other pharmacologically similar tricyclic antidepressant drugs. *Cardiovascular:* Hypotension; hypertension; tachycardia; palpitation; myocardial infarction; arrhythmias; heart block; stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus. *Anticholinergic:* Dry mouth; blurred vision; disturbance of accommodation; constipation; paralytic ileus; urinary retention; dilatation of urinary tract. *Allergic:* Skin rash; urticaria; photosensitivity; edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis; eosinophilia; purpura; thrombocytopenia. *Gastrointestinal:* Nausea; epigastric distress; vomiting; anorexia; stomatitis; peculiar taste; diarrhea; parotid swelling; black tongue. *Endocrine:* Testicular swelling and gynecomastia in the male; breast enlargement and galactorrhea in the female; increased or decreased libido; elevated or lowered blood sugar levels. *Other:* Dizziness; weakness; fatigue; headache; weight gain or loss; increased perspiration; urinary frequency; mydriasis; drowsiness; jaundice; alopecia. *Withdrawal Symptoms:* Abrupt cessation after prolonged administration may produce nausea, headache, and malaise. These are not indicative of addiction.

For more detailed information, consult your MSD Representative or see full Prescribing Information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486.

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Addendum

A suggested four-point rating scale to help evaluate patient progress week-to-week or month-to-month when presenting symptoms include anxiety or agitation with depression.

Mood—degree of depression (facial expression, voice quality, conversation content).

1. Continued profound depression, feelings of hopelessness.
2. Feeling "blue," chronic pessimism, rare cheerfulness.
3. Appropriate cheerfulness, slight depression, diluted pleasure capacity.
4. Appropriate cheerfulness and optimism.

Psychomotor Activity—reflective of emotional pressure (hypoactive patient).

1. Immobile, not fulfilling daily responsibilities.
2. Generalized slowness, constant fatigue.
3. Appropriate motor activity in most instances.
4. Activity appropriate in degree and duration to environmental stimuli.

Performance — vocational.

1. Unable to perform at all.
2. Works intermittently with difficulty.
3. Full-time employment, moderate pride in achievements.
4. Full-time employment, functioning efficiently, deriving pleasure from achievements.

Anxiety Amelioration — in terms of motor, affective, autonomic and verbal phenomenon.

1. Panic, incessant movement, state of terror.
2. Moderate restlessness, pacing, moderate expression of fear.
3. Slight restlessness, slight affective expression of fear.
4. Calm, no restlessness, expression of fear (when it occurs) appropriate to severity of stress.

Amelioration of Symptoms

1. Symptoms unchanged or worse.
2. Fair, slight improvement, patient still plagued with symptoms.
3. Symptoms markedly reduced in intensity and frequency, able to cope.
4. All presenting symptoms gone.

Adapted from Lesse, S.: Anxiety, Its Components, Development and Treatment, Grune & Stratton, New York, 1970.

Help release her from severe anxiety. Then she can open up to you.



Only with relief of the severe anxiety that often blocks verbalization can many patients expect to progress in therapy. To this end, Serax may prove beneficial, for it is now well established as an effective antianxiety adjunct. Serax offers flexibility as well. Dosage can be readily adjusted to individual needs. To the point where the patient may frequently resume normal work activities.

As with other CNS-acting drugs, patients should be cautioned against driving automobiles or operating dangerous machinery until it is known that they do not become drowsy or dizzy on oxazepam therapy. When prescribing, carefully observe dosage recommendations and appropriate precautions, especially as pertaining to the elderly or where a drop in blood pressure might lead to cardiac complications.

In severe anxiety

Serax®
(oxazepam)

Wyeth Laboratories
Philadelphia, Pa. 19101

Please see important information on page after next.



UNIVERSITY COLLEGE
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C. U.

Help release her from severe anxiety.



Indications: Oxazepam is indicated for the management and control of anxiety, tension, agitation, irritability and related symptoms. Such symptoms are commonly seen in patients with a diagnosis of psychoneurotic reaction, psychophysiological reaction, personality disorder, or in patients with underlying organic disease.

Anxiety associated with depression is also responsive to oxazepam therapy.

This product has been found particularly useful in the management of anxiety, tension, agitation and irritability in older patients.

Alcoholics with acute tremulousness, inebriation or with anxiety associated with alcohol withdrawal are responsive to therapy.

Contraindications: History of previous hypersensitivity to oxazepam. Oxazepam is not indicated in psychoses.

Warning: *Use in Pregnancy:* Safety for use in pregnancy not established.

Precautions: Hypotensive reactions are rare, but use with caution where complications could ensue from a fall in blood pressure, especially in the elderly. Withdrawal symptoms upon discontinuation have been noted in some patients exhibiting drug dependence through chronic overdose. Carefully supervise dose and amounts prescribed, especially for patients prone to self-overdose; excessive, prolonged use in susceptible patients (alcoholics, ex-addicts, etc.) may result in dependence or habituation. Reduce dosage gradually after prolonged excessive dosage to avoid possible epileptiform seizures. Withdrawal symptoms following abrupt discontinuance are similar to those seen with barbiturates. Caution patients against driving or operating machinery until absence of drowsiness or dizziness is ascertained. Warn patients of possible reduction in alcohol tolerance.

Not indicated in children under 6 years; absolute dosage for 6- to 12-year-olds not established.

Adverse Reactions: Therapy-interrupting side effects are rare. Transient mild drowsiness is common initially; if persistent, reduce dosage. Dizziness, vertigo and headache have also occurred infrequently; syncope, rarely. Mild paradoxical reactions (excitement, stimulation of affect) are reported in psychiatric patients. Minor diffuse rashes (morbilliform, urticarial and maculopapular) are rare. Nausea, lethargy, edema, slurred speech, tremor and altered libido are rare and generally controllable by dosage reduction. Although rare, leukopenia and hepatic dysfunction including jaundice have been reported during therapy. Periodic blood counts and liver function tests are advised. Ataxia, reported rarely, does not appear related to dose or age. These side reactions, noted with related compounds, are not yet reported: paradoxical excitation with severe rage reactions, hallucinations, menstrual irregularities, change in EEG pattern, blood dyscrasias (including agranulocytosis), blurred vision, diplopia, incontinence, stupor, disorientation, fever and euphoria.

Availability: Capsules of 10, 15 and 30 mg. oxazepam; tablets of 15 mg. oxazepam.

Serax®
(oxazepam)

Wyeth Laboratories
Philadelphia, Pa. 19101

Drug-Induced Constipation

Many of the widely prescribed drug categories—antacids, analgesics, barbiturates, tranquilizers, diuretics, hematinics, antihistamines, anticholinergics, antispasmodics, narcotics, muscle relaxants, antihypertensives, antidepressants—may interfere with the regular bowel action.

The value of SENOKOT Tablets/Granules has been clearly demonstrated in drug-induced or drug-aggravated constipation. In 5 studies* SENOKOT therapy was effective in 98.5% of 613 cases.

When an essential drug you prescribe induces or aggravates constipation, Rx or recommend a SENOKOT laxative product. Compatible with antacids, clinically tested, shown not to interfere with the action of numerous drugs, it is the *natural* choice to keep things moving gently, comfortably, effectively.

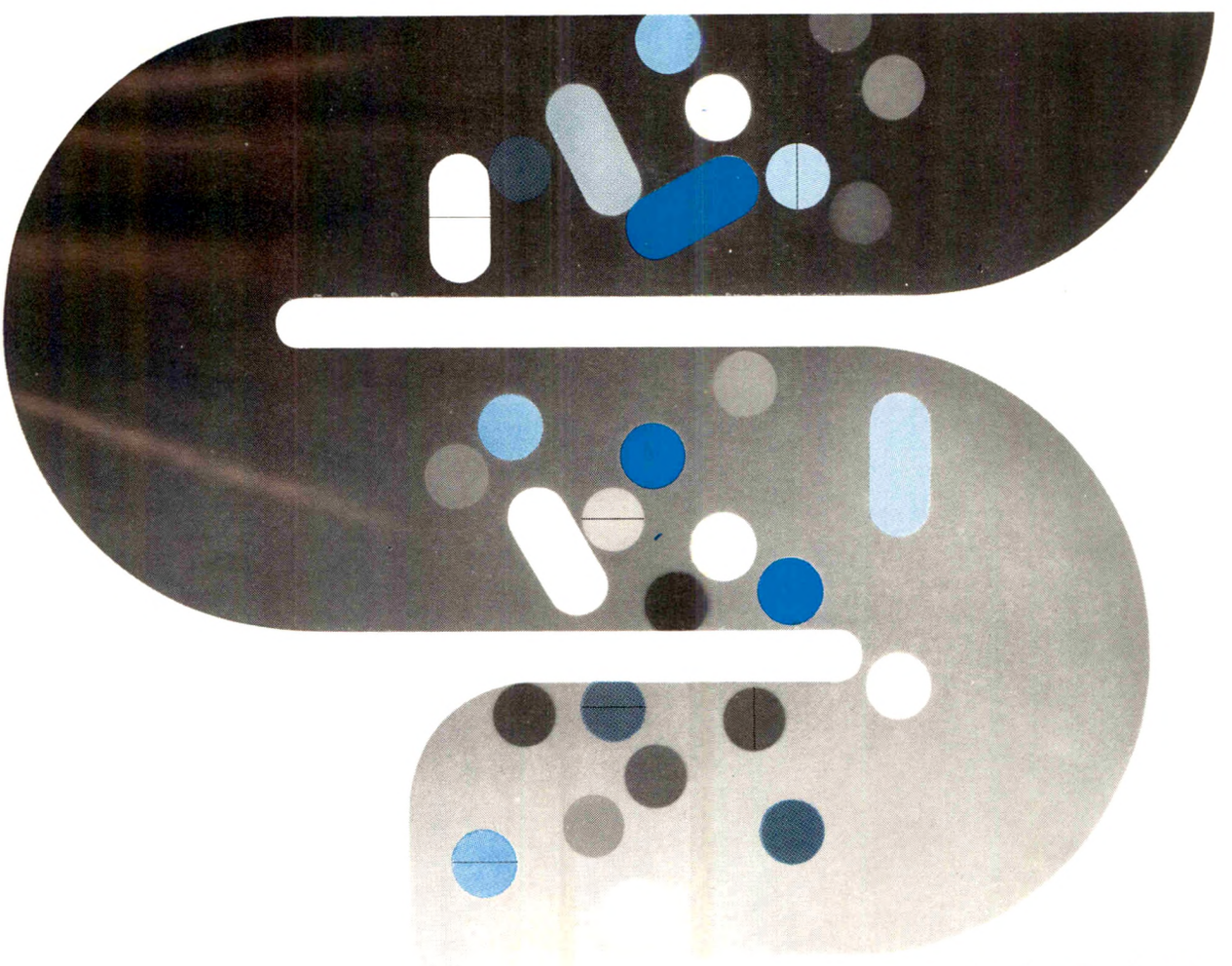
Supplied: SENOKOT Tablets (small, easy-to-swallow)—Bottles of 50 and 100. SENOKOT Granules (delicious, cocoa-flavored)—4, 8 and 16 ounce (1 lb.) canisters.

*References on request.

Counteract with Senokot

(standardized senna concentrate)
Tablets/Granules

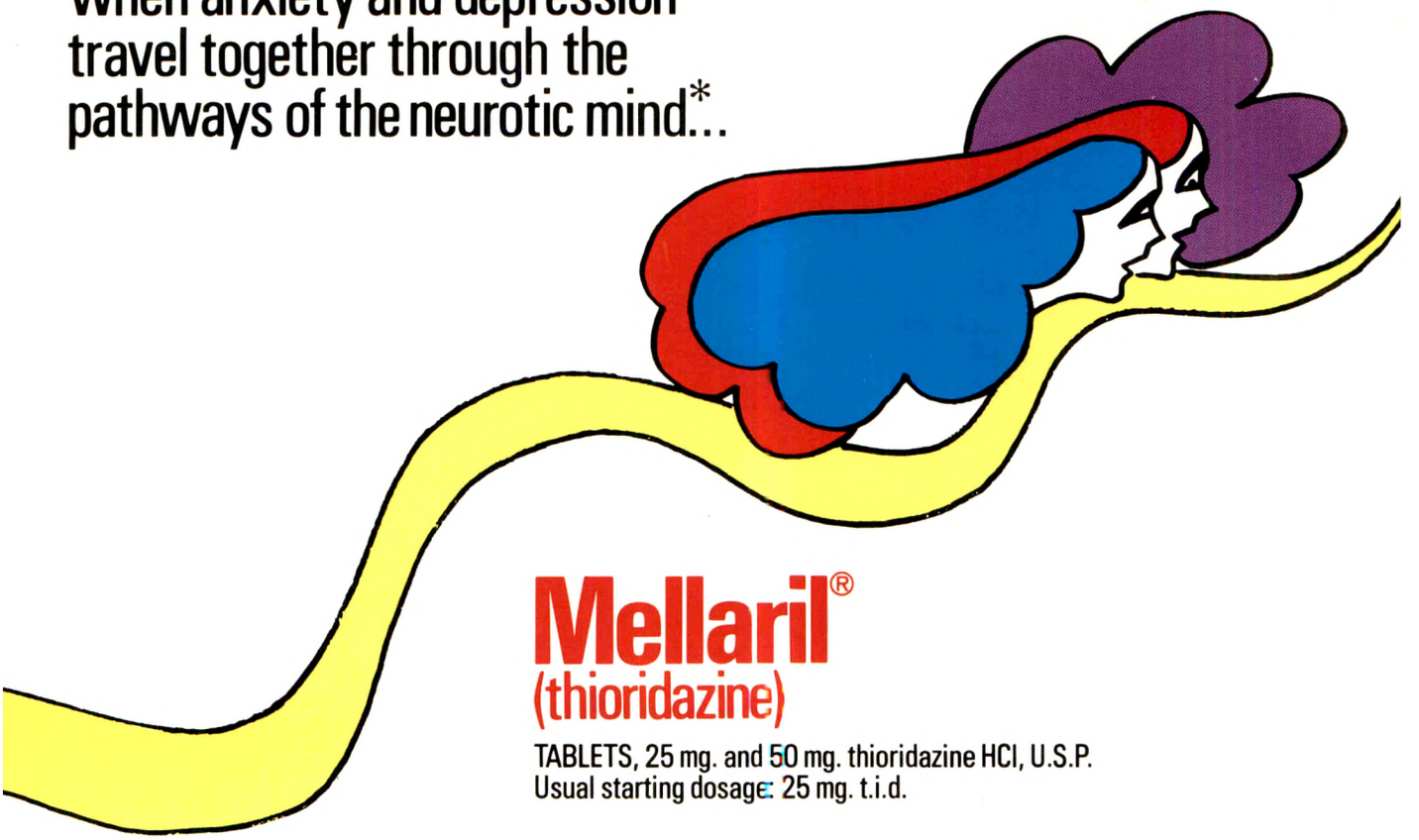
a natural laxative



Purdue Frederick

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when anxiety and depression travel together through the pathways of the neurotic mind.*...



Mellaril®
(thioridazine)

TABLETS, 25 mg. and 50 mg. thioridazine HCl, U.S.P.
Usual starting dosage: 25 mg. t.i.d.

*Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified this indication as "probably" effective.
Final classification of the less-than-effective indications requires further investigation.

Before prescribing or administering, see Sandoz literature for full product information. The following is a brief summary.

Contraindications: Severe central nervous system depression, comatose states from any cause, hypertensive or hypotensive heart disease of extreme degree.

Warnings: Administer cautiously to patients who have previously exhibited a hypersensitivity reaction (e.g., blood dyscrasias, jaundice) to phenothiazines. Phenothiazines are capable of potentiating central nervous system depressants (e.g., anesthetics, opiates, alcohol, etc.) as well as atropine and phosphorus insecticides. During pregnancy, administer only when the potential benefits exceed the possible risks to mother and fetus.

Precautions: There have been infrequent reports of leukopenia and/or agranulocytosis and convulsive seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmentary retinopathy may be avoided by remaining within the recommended limits of dosage. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., driving), and increase dosage gradually. Orthostatic hypotension is more common in females than in males. Do not use epinephrine in treating drug-induced hypotension since phenothiazines may induce a reversed epinephrine effect on occasion. Daily doses in excess of 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: *Central Nervous System*—Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. *Autonomic Nervous System*—Dryness of mouth, blurred vision, constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. *Endocrine System*—Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. *Skin*—Dermatitis and skin eruptions of the urticarial type, photosensitivity. *Cardiovascular System*—ECG changes (see *Cardiovascular Effects* below). *Other*—A single case described as parotid swelling.
The following reactions have occurred with phenothiazines and should be considered: *Autonomic Reactions*—Miosis, obstipation, anorexia, paralytic ileus. *Cutaneous Reactions*—Erythema, exfoliative dermatitis, contact dermatitis. *Blood Dyscrasias*—Agranulocytosis, leukopenia, eosinophilia, thrombocytopenia, anemia, aplastic anemia, pancytopenia. *Allergic Reactions*—Fever, laryngeal edema, angioneurotic edema, asthma. *Hepatotoxicity*—Jaundice, biliary stasis. *Cardiovascular Effects*—Changes in terminal portion of electrocardiogram, including prolongation of Q-T interval, lowering and inversion of T-wave, and appearance of a wave tentatively identified as a bifid T or a U wave have been observed with phenothiazines, including Mellaril (thioridazine); these appear to be reversible and due to altered repolarization, not myocardial damage. While there is no evidence of a causal relationship between these changes and significant disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients showing characteristic electrocardiographic changes while taking the drug. While proposed, periodic electrocardiograms are not regarded as predictive. Hypotension, rarely resulting in cardiac arrest. *Extrapyramidal Symptoms*—Akathisia, agitation, motor restlessness, dystonic reactions, trismus, torticollis, opisthotonus, oculogyric crises, tremor, muscular rigidity, and akinesia, occasionally persisting for several months or years especially in elderly patients with brain damage. *Endocrine Disturbances*—Menstrual irregularities, altered libido, gynecomastia, weight gain, false positive pregnancy tests. *Urinary Disturbances*—Retention, incontinence. *Others*—Hyperpyrexia; behavioral effects suggestive of a paradoxical reaction, including excitement, bizarre dreams, aggravation of psychoses, and toxic confusional states; following long-term treatment, a peculiar skin-eye syndrome marked by progressive pigmentation of skin or conjunctiva and/or accompanied by discoloration of exposed sclera and cornea; stellate or irregular opacities of anterior lens and cornea.

72-466

SANDOZ PHARMACEUTICALS, EAST HANOVER, N.J. 07936

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THE AMERICAN JOURNAL OF PSYCHIATRY

The Future of Psychiatric Education

BY LOUIS JOLYON WEST, M.D.

The psychiatrist of tomorrow, while retaining his hard-won expertise in psychodynamics and psychotherapy, will be considerably more of a neurobiologist, endocrinologist, behavioral scientist, even mathematician, than is common today. He will be expected to integrate advances in research on both brain and behavior, and to apply the amalgam in a truly biosocial approach to the field of mental health and the practice of medicine. Therefore the psychiatrist's education must provide him with a great variety of knowledge without sacrificing depth, scholarship, or humanity. Four years of college, four of medical school (with the emphasis on breadth and enrichment rather than on early specialization and shortcuts), and four of rigorous postdoctoral education will not be considered irrelevant or excessive. Furthermore, psychiatry and the behavioral sciences will become increasingly important in the education of all physicians and other health professionals. Thus liaison teaching will be a major responsibility of psychiatric educators in the future.

THE FUTURE OF PSYCHIATRIC EDUCATION is inextricably linked with the future of medical education in general. Advances in psychiatry will derive naturally from new knowledge produced by basic and applied research in the biomedical and behavioral sciences and from ongoing clinical investigation in various disciplines, including our own. Progress will also be a benefit of developments in educational technology: the use of film, audio- and videotapes and cassettes, programmed instruction, modular student laboratories, library carrels with individual computer terminals and viewing screens, and so forth.

At the same time the content of psychiatric education will necessarily reflect the evolution of psychiatry itself. Physicians must become increasingly well equipped to utilize a knowledge of psychiatry in the practice of medicine, whether or not they become psychiatrists, and specialists in psychiatry must be trained in light of the latest advances in the field. Therefore I have chosen in this discussion to emphasize my view of psychiatry to come, for which the psychiatric education of the future should be the preparation.

Coleridge said, "In today already walks tomorrow." What harbingers of future psychiatry can be seen in the present? Our specialty today contains much that seems new to those whose medical education—like mine—began more than a quarter of a century ago. Newness, of course, is not synonymous with value. As the philosopher Herbert Feigl once remarked about the teachings of Count Alfred Korzybski, "All that is good in general semantics is not necessarily new; and all that is new in it is not necessarily good!"

I would make the same declaration about certain current trends in medical education (e.g., shortening the basic course of study, eliminating the internship, fostering earlier commitments by students to specialties). There are even those who would say it about recent developments in psychiatry as a whole. The community mental health movement, for instance, has not been without its critics, from Ralph Nader to Thomas Szasz. Even supporters, like myself, of the general effort to make our field more relevant to major social issues and community concerns have been bemused by some of the recent setbacks for psychiatry. These setbacks have followed in the wake of major government emphasis upon and investment in mental health service delivery systems emphasizing comprehensive community mental health centers, seemingly (if not truly) at the expense of fundamental psychiatric education and research.

The past and the present of psychiatry have much to teach us. We must learn from our mistakes. As an example, the danger of being oversold, either by our own enthusiasm or by that of our friends, should now be clear to all of us. We must be sure in the future to teach our students not only the value of psychiatry and its genuine possibilities, but also its limitations and the risks attending excessive expectations by practitioners and public alike.

Certainly we would be wise to learn from the history of

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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psychiatry. But positive projections for the future must stem from our vision of that future. As Burke said, "You can never plan the future by the past." Looking ahead, I believe that one of the most impressive requirements for psychiatric education will be its responsiveness to the great surge of science, which is producing new information at an awesome rate.

NEW KINDS OF KNOWLEDGE

The information explosion in this decade will reach fantastic proportions. Biochemistry, biophysics, genetics, membrane physiology, molecular biology, and developmental biology will progress so fast and so far that we shall barely be able to grasp the significance of their advances, much less claim them for psychiatry. Nevertheless, psychiatry's responsibility will be to comprehend scientific progress in the biological sciences, to integrate it meaningfully with the behavioral sciences (where there is also an information explosion going on), and creatively to seek applications of the resulting compound that will be relevant to mental health and the practice of medicine.

Therefore the psychiatrist of the future, to fulfill his destiny as a creative integrator in applied psychobiology, will be required to master the tools of synthesis: an exceptionally broad scientific vocabulary; familiarity with communication theory, information theory, general systems theory, and the like; and a working knowledge of the most useful conceptual models that the state of science will have generated by that time.

Mathematical Models

For example, I predict the increasing use of mathematical models in psychiatric research. Physicists have had to make fundamental distinctions among scalar, vector, and high-order tensor quantities. Psychiatrists, psychologists, and even sociologists eventually will be required to do the same. We shall of course continue to construct nonnumerical models. However, the mathematical variety is more powerful in its descriptive and predictive ability. Furthermore, the quantitative analysis of psychological and social events in relation to biological and physical ones would be greatly facilitated if mathematical models were employed.

The creation of such models will be based not only on advances in science but on a much sounder understanding of mathematical logic. Soon, central nervous system functions will be studied by the employment of models with special topological properties, as well as by statistical models comparable to those used today by physicists in statistical mechanics and quantum statistics.

In areas such as learning, motivation, and personality (including diagnosis and psychotherapy) we must continue to strive to develop effective models of the universal type; a truly unified behavioral science requires them. Progress along these lines could permit the redevelopment of a field-theoretical approach to behavior, allowing a closer linkage between biophysical and behavioral events. In this development many of the significant and neglected contributions of Gestalt and Lewinian psychology might finally find their proper, honorable place.

Other important progress can be anticipated in research on subjective phenomena and on what is now being called psychophysics (e.g., the sense of time). Here quite radical mathematical models will be necessary. Finally, we can look forward to models that comprehend simultaneously both physical and behavioral events. If the history of the physical sciences provides any clue to what we might expect once adequate models become available, doors may open into areas of investigation and application that are as yet unknown or only vaguely perceived. Beyond these doors whole new branches of behavioral science may come into being.

Through such a door can be seen an apparatus that functions as a model demonstrating how neurons perform as units while simultaneously as a three-dimensional solid group they obey laws of wave motion based on electrochemical resonance phenomena. Larger models composed of aggregates of these neuronal clusters may even serve as true brain models. Meanwhile new materials (some already being developed) can be expected to permit semipermanent transectodermal pipes, tubes, and electrodes to be attached in transition between metals or plastics and biological tissues. Together with advances in immunology (promising soon to make successful homografts commonplace), we should anticipate eventual transplantation of either biological brain tissue or solid-state electronic modules capable of brain-type functions, powered by biochemical interaction with the physiological milieu.

Data Storage and Retrieval

Since general mathematical models, such as those proposed by signal detection theory, will soon be capable of organizing data from all aspects of information processing, the psychiatrist of the future will no longer be primarily required to conserve or reduce information. Electronic data processing machines will do that. Man's exploitation of the enormous storage capacity and speed of computers should make him more able to act primarily as a source of new information. This means a greater emphasis on creativity. In fact, today's new science of self-organizing systems can be expected eventually to evolve general models for the measurement and prediction of creative behavior in both man and computer.

Such models will contain general propositions capable of dealing with primitive elements (such as neural networks) as well as highly evolved ones (such as social groups and nations). Furthermore, in the evolution of man-computer systems the communication problem will significantly diminish. Instructions will be spoken to the computer, and verbal as well as visible responses will be obtained from it.

The decision-making process will shortly become a central issue in behavioral research. Born of the need for greater reliability in man-machine systems, current approaches to human information processing (as man senses, registers, stores, transforms, integrates, retrieves, and transmits information) will continue to develop

swiftly and will extend to social and even political applications. Today's beginnings (with concepts such as signal-detection theory, channel capacity, subjective geometry of the stimulus space, the "verbal-loop" hypothesis of encoding visual and auditory configurations for short- and long-term retentions, etc.) will lead to major new attacks on the problem of logical choice based on past experience. The purely human existential impasse, of course, will remain.

The psychiatrist of tomorrow will still be concerned with the immediate state of the organism, its most probable state at a specified future time, and the cost of its maintaining or improving current levels of performance. However, assessments will be made through increasingly accurate biochemical, psychophysiological, and behavioral monitoring. The output of individual glands such as a sweat gland (or the parotid gland; the secretion of which contains a fraction equivalent to blood serum) will be tapped and analyzed by advanced micro-methods and gas chromatography. Psychophysiological measures will employ on-line auto-correlation and cross-correlation techniques (e.g., spectral analysis) for predicting future states from ongoing data flow. Stochastic and Markovian statistical methods will lead to the development of predictable sequences of performance as they relate to sequential states of the human subject.

In this connection we must expect to break away from presently limited models for sequential analysis. These assume that input-output, stimulus-response, and man-machine relations are linear. This is related to the sister assumption that such systems are ergodic (i.e., that transitional probability relating state to state remains constant over time). However, ergodicity characterizes the state of man only briefly and only under special circumstances. Although most learning theory currently assumes constant attention, we already know that intensity and direction of attention fluctuate constantly in relation to both periodic and nonperiodic variables. As we employ more sophisticated models, rapid progress in psychiatric practice and theory can be expected to accompany sounder (albeit more complex) basic assumptions about man as a biosocial entity.

Psychophysiology

The present heavy emphasis on technical methodology in psychophysiological recordings will soon give way to more integrative types of analysis of relations between psyche and soma. Differentiation between stimulus-response specificity and individual response stereotypy will be simplified. The clinician will become increasingly interested in autonomic profiles. (Already, advocates of transcendental meditation are widely citing them!) The correct application of the law of initial values eventually should be determined for all autonomic measures, with a modified procedure for each, and with response intensity corrected by some function of the base level in every case. The resting autonomic profile will finally be understood as an interaction between the state of autonomic balance and learned behavior. Balance will probably emerge as a reflection of neurophysiological processes in the limbic system responsible for the individual's general emotional state. The response profile, on the other hand, will be understood more definitely as a function of learned behavior.

Tremendous progress is forthcoming in the analysis of psychobiological periodicity. More and more psychiatric interest will focus upon the mechanisms of variability in circadian rhythms and biological clocks. These and related observations will contribute to advances in the prediction, analysis, and control of behavior or performance. For example, research on diurnal periodicity has led to a growing appreciation of how sleep and its associated bioelectrical and metabolic rhythms—both fast and slow—provide a unique window through which to assess basic facts about the state of the organism. The implications for psychiatry are numerous and profound. Sleep analysis will soon be fundamental in research on psychopathology, in psychiatric diagnosis, and in following a patient's clinical course.

The psychophysiology of conditioning is fast approaching definition. Psychiatrists must begin to scrutinize the differential development of conditional responses during human life, with special emphasis on early experience and on transactions between the maturing brain and the changing environment that take place during so-called critical periods of growth and development.

Psychiatry's preoccupation with patients' pathological reactions to noxious stimulation and stress will be modified increasingly by consideration of positive consequences, such as the adaptation to stress through time. Our fascination with the psychodynamics of neurosis and psychosis must accommodate a greater emphasis on understanding the total biosocial dynamics of developing and maintaining good mental health. Thus we can expect increasingly active research on feelings such as joy, tranquillity, and satisfaction.

The investigation of cognition is moving toward the isolation of numerous variables and the establishment of nomothetic relationships among cognitive strategies, social cues, and memory information as they affect the formation of concepts. The identification of conjunctive, disjunctive, and biconditional associations will provide a better understanding of developmental factors in cognitive functioning. A model of cognition can be foreseen that will predict rates and types of information processing and higher levels of intellectual functioning, based on degrees of complexity, effects of social cues, and the functions of positive and negative feedback.

Problems of Consciousness

Progress in research on psychedelic drugs should lead to a resurgent interest by psychiatrists in problems of consciousness, including areas—such as epilepsy—long neglected. Ten years from now, every young psychiatrist will understand how to employ computerized EEG analyzers, as well as the corresponding successors to electromyography, electro-oculography, rheoencephalography, and the cortical evoked potential displayed by computers of average transients (CATs). These devices will be widely utilized in the study of problems of conscious-

ness and of other clinical problems, ranging from measurement of changing psychopathology to prediction of behavioral response patterns. The meaning of any given set of recordings may one day be obtained by processing it in relation to banks of analyzed and coded bioelectric recordings that will be centralized, perhaps at the National Institute of Mental Health, or as an extension of today's Medical Literature Analysis and Retrieval System (MEDLARS) at the National Library of Medicine.

Genetic and Biochemical Research

The genetic codes for any predisposing factors in the major mental illnesses should be deciphered in the near future. If so, the incidence of schizophrenia could be diminished by warning prospective marriage partners of the odds regarding risk to their offspring. Having identified a predisposed child, we might be able to diminish the likelihood or severity of schizophrenic reactions through improved child-rearing practices (e.g., continual close, affectionate contact between mother and child until he is past age three, with much handling, reality-oriented communication, and maximally undistorted interaction).[1]

Successful early diagnosis of onset (or recrudescence) of schizophrenia should soon be abetted by specific tests for pathognomonic psychophysiological reactions (e.g., increased electroencephalographic beta activity during REM sleep). Chemical tests for metabolic aberrations should also help. Perhaps the hypermethylation of biogenic amines will finally be confirmed as a manifestation of the acute phase of certain psychotic processes, thereby providing advance notice of illness as well as a clue to successful treatment. The present controversy over megavitamin therapy and the so-called orthomolecular approach may well revive the genetotrophic concepts of Roger Williams on a new and far more sophisticated level than was possible 20 years ago.

The symptoms of psychiatric illness, when they do appear, will be more and more modifiable through graded and symptom-specific pharmacological intervention. Even in the most disturbed or chronically hospitalized cases, severe ego disruption may be relieved by deliberately induced masking effects. The psychopharmacological revolution will continue to make possible important new advances in the chemotherapy of mental illness.

[1] Of course, the most difficult problem relating to the epidemiology of schizophrenia may turn out to be a paradox. With the growing emphasis upon ambulatory control of schizophrenics by means of drugs, there will be more carriers of the genetic defect abroad in the community. Even with relatively good symptomatic control, many of these people may suffer poor judgment regarding contraception and parenthood. This, combined with the relative skewing of the schizophrenic population toward poverty and ignorance, could mean an increasing number of genetically predisposed offspring. Furthermore, the predisposed children born to ambulatory schizophrenics will be less likely than the average child to receive the benefits of prophylactically desirable child-rearing practices by their handicapped parents. Thus, despite enormous progress in genetics, child development, and psychopharmacology, we may well be faced with an increasing schizophrenic population, concentrated more and more in the lower socioeconomic segment of society. This problem could pose a major challenge to social psychiatry in the future.

Research in Psychotherapy

Meanwhile, progress in research on psychotherapy will also be taking place. Computer analysis of the results of different types of treatment should eventually provide data permitting more precise prescriptions of appropriate therapy for patients of a given age, sex, intelligence, personality configuration, and nature and intensity of psychopathology. Today's relatively simple robot interviewing machines will lead to much more effective, extensively computerized devices capable of a high degree of response variability, and even of conducting procedures resembling individual psychotherapy, behavior modification, group psychotherapy, and group learning experiences for human subjects. Such approaches will also surely reveal and clarify those aspects of psychotherapy which must remain strictly human.

On-line recording and computerized processing of psychophysiological variables in both psychotherapist and patient during therapeutic sessions should yield further results in the measurement of transference and countertransference phenomena. We can expect to devise better maneuvers or combined methods (drugs, hypnosis, meditation, environmental manipulation, etc.) for facilitating the emergence of primary process material. It is not impossible that the sensory isolation tank or chamber will, in some difficult analytic cases, replace the couch. A continuing place for psychoanalysis is also foreseen, with a progressively evolving body of theory but with educational and research underpinnings shifting steadily from existing psychoanalytic institutes (which will remain as professional societies) to new programs in continuing education at universities.

Successful treatment of many drug addicts and alcoholics can be expected to utilize aversion syndromes (produced both instrumentally and by drugs), specific long-acting antagonists, and other biological augmentations to the necessary psychosocial commitment. Physiological components of addiction may come to be understood as resulting not so much from biochemical accommodation as from a heretofore poorly understood manifestation of the immune response, or specific reactions of cell assemblies in certain parts of the brain. This, together with studies on experimental addiction in animals, could lead to the emergence of a new concept of the biogenesis of addiction and a rational treatment for the craving states and withdrawal syndromes of addicts. If this occurs, some form of immunization against a specific addiction would not be out of the question. In fact, by combining addictive substances (such as opiates) with chemicals that block the addicting process, a marvelously extended variety of psychotropic substances could become safely available. Morphine, heroin, and synthetic narcotics might well be prescription drugs in psychiatry, if the danger of addiction were negated. Addiction, where it is still found in the future, should be attacked more effectively as a medical problem than has been the case in the past.

However, illicit drugs, even though they are not physically addicting, will continue to be a matter of major concern. Psychological dependency on drugs could well be-

come increasingly troublesome as psychopharmacology continues to advance. From thousands of relatively safe psychotropic substances that the pharmaceutical industry will develop it will be possible to achieve a great variety of altered mental states. These, according to the needs and desires of individuals, will be increasingly prescribed, sought out, or retreated into. Indeed, a debate may soon be raging among some clinical scientists on the question of whether clinging to the drug-free state of mind is not an antiquated position for anyone—physician or patient—to hold, when cheap, safe, specific, and pleasant psychotropic medications are readily available. Such a debate can be read in Aldous Huxley's 1932 novel, *Brave New World.*

As violence and antisocial activity continue to increase in the Western world, society looks to psychiatry for more help in these areas than we have provided thus far. Research on social conflict and life-threatening behavior will be given increasingly higher priority in psychiatry, with emphasis on analysis of the causes and prevention of racism, prejudice, class hatred, cultural deprivation, and violent crime. More effective treatment and control methods may be expected to emerge from continuing studies of group dynamics.

Psychiatry can also be expected to experience a growing preoccupation with character and behavior disorders. Longitudinal studies of differential child-rearing practices should yield important results. Thus research on offenders, including their reeducation and rehabilitation, will soon become a major multidisciplinary scientific endeavor involving psychiatry to a considerable degree. The prediction of dangerousness will be increasingly refined and quantified, although never, of course, perfected.

In sum, the greatest advances in psychiatry for the next two decades can be expected to come about through the integration and application of progress in fields such as genetics, biochemistry, pharmacology, neurophysiology, endocrinology, electronics, data processing, computer science, sociology, psychology, child development, and cultural anthropology. The psychiatrist will increasingly understand the genesis of psychoses, to a considerable degree the neuroses, and to a lesser but yet respectable degree the character and behavior disorders. He will have become oriented to integrative as well as analytic clinical research—fruitfully so for purposes of application in practice.

BARRIERS TO PROGRESS

However, there will be profound difficulties facing the psychiatrist in applying this knowledge. The shortage of scientific manpower will be critical. (The withdrawal and disruption of federal backing of research training and general research support are already producing effects that will be painfully felt for years to come.) Enormous social and economic problems will exist in relation to the population explosion and urban blight. Developments in atomic physics and solar power leading to cheap desalinization of sea water will cause major shifts of population. Industrial automation will produce more leisure time for more people, but not the wisdom or even the freedom to use that time to best advantage.

Further loss of family structure, diminution of parental sex-role differentiation, and greater mobility will probably be increasing sources of stress. Meanwhile, sweeping realignments of political and military forces throughout the world will be taking place. The expense of this will be added to the cost of continuing to explore the four corners of the solar system, the depths of the sea, and the bowels of the earth. All of this turbulence and flux will inevitably affect the life and career of the psychiatrist.

Nevertheless he will continue addressing himself to the mysteries of human nature in health and disease. Assisting him in this endeavor will be remarkable new equipment, including computers capable of duplicating many biological transactions, and a whole array of contributions from the field of bioengineering. He will be wrestling with the psychobiology of the most human aspects of learning, thinking, feeling, remembering, decision making, self-control, creativity, even ethical sensibility. The gradient of understanding in analysis of transactions among systems will still be highest with the smallest (e.g., atomic, molecular, and organic) but it will be much easier to move from these levels to those of organismic, group, and social transactions without changing languages—perhaps eventually without even having to change theoretical models.

THE PSYCHIATRIST OF TOMORROW

How will the psychiatrist be professionally occupied as all these changes take place? In my opinion he will become more and more firmly identified with the profession of medicine, which itself will be undergoing significant change. The psychiatrist of tomorrow will be much more of a neuroscientist than he is today; he will at the same time perforce become more of a social and behavioral scientist as well. The increasingly scientific roots of psychiatry, steadily replacing empiricism, will naturally necessitate substantial changes in education, not only for the psychiatrist, but also for other mental health professionals.

These allied helpers and colleagues must be considered in relation to the topic before us, because much of what is done by psychiatrists today will be done by others tomorrow. This trend can be seen throughout the field of health; many specialties are involved.

Thus one might predict that, in the relatively near future, most of the straightforward psychotherapy—both individual and group—will be done by clinical (or medical) psychologists. Social workers and psychologists with special training in sexology and group dynamics will be doing more of the marriage and family counseling. Community consultation on many mental-health-related matters will increasingly be carried out by experts from fields other than psychiatry: epidemiologists, applied sociologists, criminologists, specialists in community medicine, etc.

Hospitals, mental health centers, and mental-health-related community programs will be directed more and more by specially trained nonphysicians: executives with advanced university degrees in health administration.

In ten years educators, educational psychologists, school counselors, nurses, and even new paraprofessionals (e.g., mental health engineers) will be doing a considerable amount of preventive psychiatry. Ministers will be deeply involved in group encounter work. Meanwhile, a great deal of general office psychiatry, including the prescription of medication, will be carried out by physicians practicing specialties other than psychiatry: family medicine, emergency medicine, internal medicine, pediatrics, and obstetrics.

Psychiatrists, however, will be in greater demand than ever. They will be consulting with their colleagues in all of the foregoing activities, to provide the increment of additional expertise and depth that the true specialist should be expected to offer those with less, or different, training than his own.

Furthermore, the psychiatrist will be increasingly occupied with the complicated cases, the serious psychopathologies, the major mental illnesses. He will care for such patients largely in intensive psychiatric treatment units of general hospitals and also to a significant degree in mental health centers and relatively small psychiatric hospitals, both public and private. He will be using his own office for examination, diagnosis, referral, prescription of a wide variety of therapies (not only drugs) according to clinical indications and contraindications, and follow-up work.

Of course, the psychiatrist will also engage in office psychotherapy, but mostly of highly selected cases. These will be patients with difficult or severe problems—patients that the psychologist or family physician cannot manage. The psychiatrist will often be called upon to help with the patient whose physical disease has psychiatric complications, the dying patient and his survivors, the self-defeating or uncooperative patient, the mysterious or baffling case.

In his consulting work outside the hospital, again the psychiatrist will be called upon for his special expertise as the integrator of biomedical and psychosocial factors in preventing, comprehending, and ameliorating human distress. For example, I see a major and broader role for psychiatrists in relation to the care and rehabilitation of violent offenders, their victims, and the survivors of those who die by violence.

Thus the psychiatrist of tomorrow will be more of a neurobiologist, more of an endocrinologist, and more of a behavioral scientist than the psychiatrist of today. In fact, to educate him we must develop (among other experts) a new breed of behavioral neuropsychiatrist, much more biologically sophisticated than the teacher produced by the descriptive and organic schools in the past, and yet much more knowledgeable about psychosocial research than is presently the case. All this must be accomplished without yielding the hard-won expertise in psychodynamics that psychiatry has accumulated in the past 90 years.

THE CHALLENGE TO PSYCHIATRIC EDUCATION

Such a new global approach to psychiatric education might well be called *the biosocial approach*. The challenge it poses is profound.

Implications of this challenge for the medical curriculum, the medical student, and the psychiatric residency are obvious in terms of content and rigor. Much new material must be included at all levels, from premedical courses to the increasingly important postresidency programs of continuing education in psychiatry. However, to meet the challenge there are, in my view, some other implications as well.

These may best be formulated in terms of reactions to certain present trends, seen not only in medicine but in many facets of contemporary society, that many of us will welcome—reactions that are long overdue. I refer to reactions against haste, venality, sloppy craftsmanship, intellectual laxity, impersonality, creeping mediocrity, and cheap expertise.

Already we are beginning to see the emergence of a new major concern in our national consciousness—a concern with improving the quality of life. And, because medical education is part of our way of life, I shall venture some further predictions for medical education, as follows.

I predict the development of a new, well-rounded general curriculum for undergraduate medical students—a movement away from currently fashionable multiple specialized tracks. Five or six years from now, at some worthy medical school, a group of thoughtful young professors will develop a revolutionary plan. They will observe that virtually all medical students go on to become specialists. Therefore (they will reason) the medical school years should provide education to ensure the development of a man who is both a clinical scientist and a humane physician. He should receive a broad, comprehensive education in the basic biomedical, behavioral, and clinical sciences. He should also continue to learn much about man, his nature and his culture. Furthermore, he should pursue those humanities which can help make a physician more than simply a high-level health-and-disease technologist.

Well, then (the young professors will say), let's pack as much as possible into the undergraduate medical education of all physicians, regardless of what specialized tracks they get onto later. After all, they will have the rest of their long lives for specialization. It is *our* responsibility to lay the broadest, soundest general groundwork to ensure that every one of our graduates will be a true physician. In an age of specialists, let every physician be a bit of a Renaissance man.

I also predict the eventual restoration of the recent cuts in time required for premedical and medical education. All of that new material (described in the foregoing) will take some time to learn! Today we hear, "Get through premed faster; graduate from medical school sooner; get into your specialty as early as possible." Nevertheless, ten years from now I foresee a full four-year requirement for premedical education, followed by four additional

years for medical school, with educational *enrichment* rather than acceleration for the more gifted student. (Authorities on early education say that enrichment rather than acceleration is the healthiest approach in the primary grades; we might learn how to apply this wisdom in the medical school as well.) The young professors will say, "If we need more doctors, let's build more medical schools; meanwhile let's not cheapen medical education by abbreviating the curriculum, overcrowding the schools we have, short-changing the students, and debasing the intellectual currency of medical practice." The public (peculiarly sensible to its own best interest) will agree.

I further predict that the loss of the internship (particularly painful to many a psychiatric educator) will eventually be grieved by many who are currently shrugging off its passing. Sooner or later our brilliant young professors, taking a fresh look at the teaching hospital, will devise something dramatically new and different: a universal first-year residency that provides a general clinical background of experience, which is bound to be desirable regardless of subsequent specialization. They'll say, "Let every physician know something of clinical medicine outside his own specialty; he'll be a better colleague and more useful consultant as a result."[2]

Emphasis on Liaison Teaching

Within the progressive medical school ten years from now I see the psychiatrist teaching up-to-date psychopathology, diagnosis, and clinical therapeutics of the mentally and emotionally ill. However, I think there will be a greatly increased emphasis upon liaison teaching by psychiatrists in other clinical departments. Psychiatry finally will be taught on pediatric, medical, obstetric, and surgical services to the extent that was envisioned years ago by John Romano. Attempts to carry out such teaching have been made at Rochester and a few other medical centers through the years. But it may be that the development during the 1950s and 1960s of special psychiatric consultation services or circumscribed psychosomatic services actually stultified rather than fulfilled the dreams of Romano, Harold Wolff, Roy Grinker, Stewart Wolf, Franz Alexander, Spurgeon English, and many others. In tomorrow's teaching hospital the entire full-time psychiatric faculty should be actively involved in liaison teaching; nearly every member of the department of psychiatry should be attached (for several scheduled hours weekly) to one of the various other hospital service units. This I think will come.

Furthermore, I expect that in every medical school a division or department of behavioral science will, in addition to providing a substantial didactic curriculum, create similar liaisons with the basic biomedical sciences. Such arrangements will ensure that the behavioral implications of basic medical sciences become part of the education of every physician. In this connection my experience at the University of Oklahoma School of Medicine from 1954 to 1969 was highly instructive. Our behavioral science course (beginning in 1956) gradually expanded from 30 lectures in the freshman year to more than 200 classroom hours, plus much additional liaison and correlation teaching, through all four years of medical school. The course content was as rigorous as in other basic science courses. From the beginning it included the philosophy of science, psychophysiology, learning, experimental and social psychology, medical sociology, anthropology, animal behavior, growth and development, and human ecology. New material on psychopharmacology, sleep, neuropsychology, group dynamics, etc., was added as it emerged and the division of behavioral sciences grew and developed.

The results were excellent. In a few years Oklahoma medical students (then in the lower third of national board scores on nearly all subjects, both basic and clinical) had risen to the upper third in human behavior and in psychiatry. Even from the beginning, however, it was possible to forecast that "the behavioral sciences must be considered basic to the education of the physician of tomorrow if he is properly to meet his responsibility to his profession, to his patients, and to himself" (1).

I have already predicted the rise of a new neuropsychiatry. The neurologists must learn more about behavior; the psychiatrists, in their progressive rapprochement with the rest of medicine, must learn more about the brain.[3] The neuropsychiatrist of the future will, in keeping with the liaison concept, work closely with colleagues in the other traditional clinical disciplines and also with those in such new specialties as family medicine, community health, and emergency medicine, to mention only three. Thus not only clinical psychophysiology but family therapy, community mental health, and emergency psychiatry will be taught in conjunction with the steady movement of medicine as a whole into these areas.

THE LOCUS FOR TREATMENT

In closing I offer one final, if allegorical, prediction.

[2] The internship is scheduled to expire in 1975, doomed by the Millis report and the general unconcern of specialty training programs and boards. Meanwhile I, as well as like-minded psychiatric educators, still refuse to accept residents without a year's medical internship or its equivalent. But how can such an experience be obtained after 1975? Obviously through a resident year in a nonpsychiatric specialty. It is possible to arrange such opportunities, even if psychiatry must share the burdens involved.

Beginning in July 1973, UCLA will accept selected students straight from medical school into a four-year psychiatric residency. These individuals will spend the entire first year as physicians learning to treat physically ill patients under their own responsibility on medicine, pediatrics, and neurology services. At the same time they will receive considerable psychiatric supervision and instruction regarding the same patients. This is essentially an initial postdoctoral year of mixed medical internship/residency, with psychiatric enrichment, followed by three full years of psychiatry. The program is already oversubscribed. I hope others will develop similar programs, thus helping to make up for the loss of the internship, and to oppose certain current forces deflecting psychiatry still further away from the mainstream of medicine at the very time when we should be moving closer together.

[3] However, a newly amalgamated neuropsychiatry may not appear until after the American Board of Psychiatry and Neurology has finally split into two separate boards, since institutions seem to follow far behind ideas.

In the near future someone (perhaps at NIMH) will develop a brilliant idea about how to care for certain severely mentally ill patients. This innovator may very well win the Hoffheimer prize for the discovery that sometimes it is a mistake to take a mentally ill patient back to the scene of his disorganization. He will show that it is contraindicated to treat every patient in the community—perhaps an inner city maelstrom—where he broke down, where the strain was enormous, where unhealthy associations remain, where the pollution is poisonous, where the noise is deafening, where there is confusion and crowding and crime. Such a return, he will prove, may actually be antitherapeutic. He'll reason, "Wouldn't it be wonderful if such patients, who have collapsed under the overwhelming stresses of the megalopolis, could somehow be removed to a quieter setting? Let's find a therapeutic milieu of tranquillity, closer to the beauties of nature, far from the madding crowd. Maybe under more peaceful conditions these patients might have a better chance to recover, to be rested and restored before returning to the fray. Perhaps they might even be helped to find another way of life, one that would lead them away from that original high-risk community."

The question is, where are you going to find such a bucolic treatment setting in the future? As the cities continue to expand, the white collar workers move out to the surrounding countryside; industry moves out after them; and blue collar workers move out after the jobs.

But wait! A great location will unexpectedly become available. The bitter battleground that has been the ghetto—virtually deserted following the expanding concentric circles of centrifugal urbanization—this inspissated, unsavory bowel of the city will be demolished, plowed over, and planted. The only structure too new and expensive to be dismantled and transplanted in the suburbs will be the magnificent comprehensive community mental health center built in the inner city during the 1970s. Therefore, since it can't be moved, the countryside will be brought in to surround it in the former urban core, now a parklike retreat. Thus, perhaps by 2000 A.D., as in the Egyptian temples of healing 3,000 years ago, psychiatry once again will be where it belongs: at the center of things.

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Questions of the Month

For each incomplete statement or question below, ONE or MORE of the completions or answers given is correct. Choose:

A if only *1, 2, and 3* are correct,
B if only *1 and 3* are correct.
C if only *2 and 4* are correct,
D if only *4* is correct,
E if *all* are correct.

Question 1

The National Institute of Mental Health is authorized by law to
(1) support through grants and/or contracts research into the causes and treatment of mental illness.
(2) provide grants for the staffing of community mental health centers.
(3) support training of mental health professionals.
(4) provide grants for the construction and staffing of mental retardation centers.

Question 2

The preferred treatment of nocturnal enuresis in childhood is dependent on which of the following?
(1) History of how it developed
(2) Availability of a conditioning apparatus
(3) Motivations of the child
(4) Results from a sleep EEG laboratory

(The Questions of the Month are from the Self-Assessment Program of the APA. The answers are supplied on page 553 of this issue.)

Western Humanism, Modern Liberal Politics, and Psychiatric Training: Friends or Foes?

BY ARNOLD J. MANDELL, M.D.

Liberalism once nourished the growth of an enlightened humanism upon the rigid constructs of analytic psychiatry. The New Left promulgates definitions of psychiatrists that are inimical to the basic postulates of psychiatry. They involve the nature of mental illness, individual responsibility for it, and the role of the professional in relation to it. American psychiatric education is challenged to train people who can cure the ills of society, but would be denied by the New Left the very tools with which we have learned to heal.

THE FIRST TIME a medical student explained to me that the disease of his socially disarticulated, paranoiac patient was a social role created by an oppressive society, I was startled. After his telephone calls to the patient's boss, union leader, and wife in the interest of gaining lebensraum for the victim, I felt confused. When he described the process of psychiatric diagnosis and the role of the psychiatrist as an example of the use of professionals as a social police force, I was irritated.

Increasingly, bright students, with good academic records, are refusing to accept the challenge of describing character in terms of the dynamics of personality; they tell me that such balanced, lyrical efforts are the masturbatory activity of the passive during this time of social change. Departmental laboratories of neurochemistry, behavioral biology, and neuropharmacology are viewed by many of them without interest; they say that they need time for community health organizing. Intensive and long-term treatment of psychiatric patients is merely a historical ritual; they want to learn crisis management and group therapy and to work in free clinics that they have helped to create through political action.

The educational process in psychiatry is becoming a vehicle for the propagation of philosophical, social, and political values. This is due in part to the kinds of students we are attracting and in part to the necessity of our reliance on subjective procedures and evaluations. The liberal position used to be an excellent matrix from which to try to modify the authoritarian superego that rules the neurotic. But the new liberalism, the New Left, has radical social change as its goal, and the institutions of psychiatry represent some of the most culpable features of the society that must be destroyed in order to build utopia.

Many potentially fine students who elect to concentrate in psychiatry, as well as residents already in training, manifest this peculiar contradictory commitment to psychiatry. I fail to see the merit in allowing a denigrating characterization of psychiatry to arise and prevail. Such a view can enhance neither the training received by young psychiatrists nor their later treatment of patients. What do they seek? Is the goal of training merely enfranchisement for greater social mobility and a more valent political image? I am always somewhat puzzled to see candidates with medical training running for elective office.

POLITICAL PHILOSOPHY AND PSYCHIATRIC PRACTICE

The line between the determinants of treatment based on scientific rationales and those based on the attitudes of social or political subcultures has always been difficult to draw. Early practitioners of psychiatry were shown by Hollingshead and Redlich (1) to be affected more by the features of their individual life history than by the features of their professional training. Right-wingers tended to wear white coats and use organic therapies. Left-wingers wore business suits and tended to practice psychoanalytically oriented therapies.

Admixtures of social, political, and philosophical concerns still struggle with technical considerations for dominance within our therapeutic strategies. Currently, personal responsibility, psychosocial determinants, definitions of sickness, and what Halleck has called "the power of the psychiatric excuse" (2) reign as the predominant issues in the field, and they probably determine therapeutic orientation more than any other factors, including efficacy.

APPLIED WESTERN HUMANISM

While the psychiatrist originally oriented to psychodynamics began to question the rigid concepts and procedures of his professional heritage, he continued to

Revised version of a paper read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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This work was supported in part by Friends of Psychiatric Research of San Diego, Inc.

The author is grateful to Dr. Marc Schuckit for the opportunity to discuss with him many of the thoughts contained in this paper.

value and to use the insights and attitudes that he had gained from it. This eclecticism gave him an orientation toward patients that was succinctly and beautifully described by Maas (3) as applied Western humanism. The modal psychiatric arrangements consisted of free communication within a matrix of relative permissiveness in a hierarchical dyad.

Gradually a neomorality that said, "Do no harm to others except for consenting adults," began to take the place of labels of sickness. The dignity of the person, his right to be unique, and the realization of his individual potential took their places as goals for the therapist. Against a culture that demanded conformity and discipline and a collective concern with identification of neurotic symptoms, humanism offered a combination of acceptance, insight, and consensual validation of reality. We felt that these values reduced anxiety and permitted patients more choices in the business of living.

Humanism thus applied does not appeal to all. Some view the problem of our age as akin to that of an individual with a character disorder, who feels little responsibility for others, little anxiety about the aspects of his behavior that might injure himself or others, and who suffers from a lack of meaning. Thus we have popular commitments to vogues like reality therapy. In contrast to the activities proposed by the New Left, such approaches basically confirm the spirit of Western humanism. In a way, they could only have become popular where humanistic aspirations held sway.

From the perspective of the New Left, however, the declared commitment of the humanists to the individual appears distorted. For one thing, the illness is seen as within the patient. It can be observed in relationships, or it might be hard to discern, but it will ultimately be found inside the mind of the individual. Not only is the disease internal to the patient, but the responsibility for its cure lies with the patient. External realities from his past and present might cause him a great deal of discomfort, and might even be etiological. Nonetheless, implicitly if not explicitly, the onus for change is upon the patient. Third, the therapist is acknowledged as the greater expert about the disease. The dyad, in spite of its permissiveness, is an authoritarian arrangement.

As nearly as I can determine, the student espousing modern liberalism is alienated by these three features, i.e., the internal locus of the disorder, the patient's responsibility to change, and the greater wisdom of the doctor. The idea of helping others to grow through their own self-realization is seen as patent nonsense. The current spate of nihilistic anarchy (thinly veiled with abstract and idealistic goals) consciously threatens the institutional arrangements that exist around the practice of psychiatry. We are hard pressed to know how to go about the business of teaching the listening and healing skills of psychiatry to these students.

THE PSYCHIATRY OF THE RADICAL RESIDENT

The manifesto of the New Left declares that an arrangement establishing the psychiatrist as the expert is intrinsically oppressive. Locating and placing the responsibility for dysfunction in the patient draws attention away from a guilty society. In the past such accusations came from gadflies like Goffman, Szasz, and Laing. Today some of our best residents and medical students claim that the very arrangements through which we teach and learn are the weapons with which the culture has victimized its now dysfunctional members. The meetings of the American Psychiatric Association have been challenged for the past several years by representatives of these victims of society and of psychiatry. The issues that they raise include the sexism innate to psychoanalytic theory, the application of psychodynamics to members of sexual subcultures, and the disregard of ethnic variables in our institutions and practices.

THE TASKS OF PROFESSIONAL ADOLESCENCE

I am not too old, nor is my memory too dim, to remember the identity crises that my fellow residents and I faced during our training. Practitioners in other areas of medicine have tangible tools to help them define their roles—scopes of one kind or another. Bereft of these, I was left with a pencil (not to be used until after the hour!) and my own musings during psychotherapy with which to draft a professional identity. I remember the struggles to achieve feelings of legitimacy. I desperately needed a firmly structured model. After experiencing the seductiveness of the pure psychoanalytic cosmology, I grew to espouse the peculiar eclecticism of applied humanism.

I was helped by my contacts with the professionals involved in my training. The psychoanalysts were theoretically rigid but could be flexible, warm, available, and adroit in their personal relationships. I encountered practitioners who were rigid in their personal relationships (and effective with certain kinds of patients) who preached theoretical eclecticism. I met some diagnostic purists and saw them make a significant contribution to the development of professional identity in residents. And then there was, of course, the grand, euphoric eclecticism which believed that no commitment to a single theoretical point of view was necessary if the individual therapist were secure. People were individuals, and one could choose methods from a wide store. Whatever worked was right.

Underlying all these options were definite consistencies. The profession of psychiatry was a helping profession. There was such a person as a sick patient. There was a professional setting, whether it was a ward, an office, or a living room. Community psychiatry was involved with the elements of the community that influenced the mental health of the individuals within it. But the paranoiac rage of the New Left threatens even these substrata. To them the society is the locus of the disease, the patient is the victim, many psychiatric settings are jails, and one's professional role is detrimental. Whereas the liberal politics of Western humanism can be integrated with the best fruits of conventional psychiatry,

it is difficult to imagine any kind of productive union with the philosophy of the New Left.

THE RESPONSE OF ACADEMIC PSYCHIATRY

We are left with a dilemma not unlike that faced by faculties in humanities departments in many universities in America today. There, too, members of the faculty and students involved in graduate education deal not with the accrual of appropriate background, knowledge, skills, and style, but engage in a struggle to establish whether the humanities should exist at all. In psychiatry it becomes increasingly clear that the major educational effort may be to win the struggle with the student about the legitimacy of the identity to which he aspires.

I have seen two types of response by faculty members to the intellectual challenges of the students of the New Left. When their own feelings of guilt or anger resonate with the students' concerns, they tend to identify with and share the nihilistic attitudes toward the traditional practices of psychiatry. I have seen professors in leading universities avoid discussions of brain chemistry, psychodynamics, clinical pathology, and development and participate vigorously in tirades against the institutions of society. Other teachers have responded by becoming more rigid and making formal efforts to keep people of radical social persuasions out of their training programs.

Another way to cope with the threat might be to define very carefully the legitimate scope of activities for psychiatry (perhaps more narrowly than one would like) and stick to those things in which we have historically claimed expertise, purposely impoverishing our areas of social and community concern so as to maintain our identity during this time of challenge. For example, it is tempting to train students in the new neuropharmacology, teach them effective biochemical treatments, give them some exposure to interpersonal sensitivity and psychopathology, and then describe them as the neurologists of behavior. We could then be few, and we could function as consultants for the primary clinical managers of illness. The need for such neurologists of behavior would not be great. Social activists would probably not apply.

It is a solution, but it is an impoverished solution. The other way, the route we are exploring tentatively in our young department, is to try the new direction to the left, to participate in whatever ways we can with the knowledge we have and see what we can make of it. We might find ways in which we could go to the community as instruments of change, using our conventional institutions and practices for larger social purposes. We might pragmatically exploit our role as professional givers of care to alter what we perceive to be social injustices.

Here on the left fork in the road we see chaos thus far. Community mental health centers in New York, drug abuse treatment programs in Boston, and some of the programs in Chicago (to name a few) are now defunct. Psychiatrists have proved inept when radicalized around social and political concerns. Our professional expertise has been downright inadequate in the sociopolitical arena.

I suspect that a factor in this could be the pressures upon us to abandon responsibility for the tasks and the milieus in which we work. We need not, it seems to me, wrench our roots from soil that has nourished us through several seasons of growth and embark upon some nebulous aerobic existence in order to cast a longer shadow. I would hope that we could effectively contribute to the prevention of social erosion by leaving our roots where they are, fertilizing them, and sending out new growth from a viable parent plant.

Our apprentices ask, more pointedly than heretofore, "What is psychiatry?" And they add, "Why is psychiatry? Should there be psychiatry?" The political and philosophical climate of our profession a few years ago provided an integrated liberal value system for therapeutic use. Now in its place in my younger colleagues is the angry nihilism of the New Left. This political matrix is not helpful to the healing art of psychiatry as we know it. Western humanism justified the psychiatrist's role as a kind parent giving nervous children the permission to live comfortably. The New Left projects a negative image of psychiatrists as the policemen of society. The most idealistic and altruistic role we can hope for in those circumstances is to be a spy within the police force.

The New Left seems to invade social institutions under the aegis of liberalism and then skew them to radical pseudoliberal goals; in so doing it discards the proverbial baby with the bath water. Western humanism and earlier liberal politics were the friends of practicing psychiatrists. The New Left shows itself, by deeds and by words, to be the foe of our old ways of being, and it challenges our relationship to our students in particular. The resolution of this issue is critical for American psychiatric education.

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A Comprehensive Alcoholism Program in the Army

BY BYRON G. FIMAN, PH.D., DARYL R. CONNER, AND A. CARL SEGAL, M.D.

The authors describe the development and operation of a comprehensive alcoholism program at Fort Benning, Ga., that might serve as a model for community alcoholism treatment. The factors that seemed especially important in the success of the Fort Benning program were: establishing working relationships with medical personnel to provide physical examinations and detoxification services; offering a variety of therapies to meet patient needs; establishing an intensive treatment program that maintains community support and does not generate the kind of iatrogenic invalidism associated with classic inpatient care; introducing a systems approach to ensure comprehensiveness and continuity of care; fostering broad community involvement in planning and implementation; staff education and development; and involvement in bringing about changes in civilian and military attitudes toward alcoholism and alcoholics.

ALCOHOLISM HAS LONG BEEN RECOGNIZED as a significant problem among military populations (1, 2). Although there are few systematic studies of the extent of problem drinking, a recent government report (3) estimated that there are 130,000 alcoholics in the Armed Forces. Hansen (4), in a recent study of Air Force drinking patterns, suggested that on an age-adjusted basis there is somewhat more problem drinking in the military than among civilians. Catanzaro (5) reported that more than 20 percent of all psychiatric admissions to an Army general hospital were for alcoholism, a rate consistent with our own military experience. Coates and Pellegrin (6) have suggested that the attempt to achieve manhood through drinking may be partly responsible for alcoholism in the military. Other factors such as the boredom, isolation, and fear associated with military assignments, as well as such institutional factors as low-cost on-post liquor stores, service club "happy hours," and beer in the barracks and mess halls may also be important.

Preventive and treatment programs under medical auspices have not been systematically developed, although from time to time there have been programs in each branch of the military (7–10). Recently there has appeared to be a growing service-wide awareness of the requirement for more comprehensive alcoholism efforts, although there has been little formal recognition and support for innovative programs. The recently published *Alcohol and Drug Abuse Prevention and Control Plan* (11) may bring about the redefinition of alcoholism from a criminal act to a potentially treatable medical condition. However, significant efforts will be needed to establish treatment resources and to overcome long-standing reservations and negative feelings held by lay and medical communities in dealing with alcoholics (12).

We feel that wider dissemination of information about current Army alcoholism programs is necessary to promote further awareness of the problem and to facilitate the development of new programs in the military and civilian communities. We will describe the development and operation on an Army post of a comprehensive alcoholism program that we believe is unique in its commitment to the concepts of comprehensiveness, community involvement, and continuity of care. It differs from programs in other military services in that it was sanctioned, developed, and supported locally, with no organizational assistance from higher level commands.

PROGRAM DEVELOPMENT

One of us (A.C.S.) became Chief, Department of Mental Health Services (DMHS), at Fort Benning, Ga., in July 1967. At that time the post served a population of approximately 120,000, including 50,000 active duty troops. The DMHS was committed to the development of a comprehensive community mental health program emphasizing continuity of care, community-based treatment, prevention, and responsiveness to community needs.

By December 1967, it became apparent to us that alcoholism was a major factor in producing psychiatric casualties. Many patients were referred because of their own alcohol-related problems; others were referred because of family problems related to alcohol abuse. Therefore services were developed specifically for alcohol-related problems. A therapy group for inpatient alcoholics and their spouses was begun and quickly expanded to include outpatients as well. Several hours each week were set aside for new referrals with alcohol problems in order to determine the extent of the problem and the appropriate treatment strategy. The new services were widely publicized in the local medical community. However, it appeared that one or two therapy groups would have little impact on the alcoholism problem. Before a comprehensive alcoholism program including preventive and treatment services

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could be developed, substantial interest and cooperation would have to be elicited from major community elements.

During the next two years a number of efforts were made by the professional staff to enlist the support of major community leaders. While the efforts were unsuccessful, they served to alert senior military personnel to our concern with the scope of the problem in the community and the availability of beginning rehabilitative services. The latter included detoxification; individual, group, and family outpatient treatment; more extensive liaison with community agencies such as Alcoholics Anonymous; and community-wide publicity and educational programs.

In late 1969 the responsibility for coordinating a post-wide meeting on alcohol abuse was assumed by a retired infantry colonel. This seemed to provide the meeting with the credibility among the military that it may have lacked in the community. Significantly, the meeting was attended by every senior commander and staff member; most of these had sent their subordinates to previous sessions. The resulting steering committee that was formed examined various aspects of alcoholism in the community and received approval from the commanding general for the establishment of a comprehensive alcohol prevention and treatment program.

DMHS staff urged that a halfway house and social lounge be provided. Many patients had been held on the psychiatric ward long after their need for total hospitalization had passed because they needed more intensive care than the staff could provide on an outpatient basis. It also had become apparent that lack of an alcohol-free social facility contributed to recidivism: recovering alcoholics were forced back into the environment of military clubs. Although many seemed to go to the club more for companionship than for alcohol, social pressures often quickly led to renewed drinking. After a strong show of community support and assistance, suitable buildings and equipment were located and were ready for occupancy in March 1970.

DESCRIPTION OF THE PROGRAM

"Benning House" is the name of the entire alcoholism program in addition to being the name of the halfway house. The program has three major components: 1) treatment and rehabilitation, 2) education and prevention, and 3) research and evaluation. In an effort to ensure comprehensiveness and continuity of care, each component has been made interdependent with others.

Treatment and Rehabilitation

The major rehabilitative program is a 90-day voluntary residential experience. Residents live in Benning House, a remodeled troop barracks, but continue to report to their units daily to perform their normal duties. The staff consists of social work officers and specialists, chaplains, a registered nurse, graduates of the program, psychology and psychiatry consultants from the DMHS, and civilian volunteers.

The treatment process begins with the referral, which may originate in one of many sources—e.g., self, family, unit commander, chaplain, or hospital. The staff is on 24-hour call, so that referrals can be processed at any time. The initial interview, conducted at the site of the referral, is used to evaluate the appropriateness of the referral, determine if detoxification is indicated, and briefly describe the program to the prospective participant. If detoxification is indicated, he is admitted to a detoxification ward at the post hospital for three to five days, during which daily contact is maintained with Benning House staff. A staff member contacts an active duty soldier's unit commander or retiree's family in order to acquaint them with the functions of Benning House and to seek permission for the man to enter the program is he so desires. If detoxification is not indicated, after a full medical examination the individual is formally admitted as a Benning House resident.

At the first meeting with his staff counselor, the resident signs a contract stating that he understands the rules and expectations of the program and is participating voluntarily in the 90-day residency. This contract is not legally binding but serves to ensure informed consent by the resident and provides a tangible statement of commitment. The counselor also schedules the resident for a medical appointment to receive his prescription for disulfiram (Antabuse), which is administered daily to all residents unless it is medically contraindicated. As a rule, no other medications are prescribed during the 90 days.

A sense of responsibility for oneself is stressed by the use of the word "resident" rather than "patient." "Patient" often connotes an individual who is being taken care of by others and thus is not responsible for his own actions. The role of the Benning House staff is to facilitate therapeutic growth in residents, not to be responsible for it. The word "resident" is discussed by each new participant and his counselor until there is a clear understanding that the resident is ultimately responsible for not only his overt behavior in the program but also for his commitment to become authentically involved in the rehabilitation process.

The residency is designed to meet the needs of both the resident and his work unit by the scheduling of all group sessions after duty hours. This allows the resident to receive treatment and still remain active in the unit. The group sessions include one sponsored by the Fort Benning unit of Alcoholics Anonymous, a group led by the staff chaplain, a couples group where the focus is on opening lines of communication in an attempt to develop a new perspective in the resident's marital relationship, and encounter groups, which are directed toward enhancing self-awareness and interpersonal competency.

Standard treatment goals expected to be met by all residents do not exist at Benning House. Each resident is viewed as an individual with unique potentials and capabilities; treatment goals are contoured to fit his individual needs. However, all residents are members of the Resident Council and share equally in voting privileges. The Resident Council, which is self-governing (staff members are present only in a liaison role), evaluates and dis-

ciplines first offenders in cases of breach of contract (second-time offenders must go before the staff), provides recommendations to the staff for improving the treatment process, grants passes to residents who wish to leave the house over the weekend, is responsible for house maintenance, and generally regulates house activities.

Halfway through an individual's residency, an in-depth treatment review is held. This conference brings together the members of the staff with psychiatric and psychological consultants to review all available information concerning the resident's progress. The conference provides a systematic evaluation of progress and an opportunity to discuss alternative therapeutic interventions. Upon completion of the 90-day period the individual receives a certificate, signed by the president of the Resident Council and the Clinical Director, stating that he has successfully completed the program. "Postgraduate" outpatient services are also available.

Education and Prevention

Benning House has developed three major roles with respect to education and prevention. The first is to serve as a change agent to facilitate changes in attitudes and perceptions concerning alcohol abuse. As long as the problem is viewed as misconduct rather than as a treatable illness, little progress can be made in reducing the incidence of alcoholism in the Army. Therefore, a great deal of emphasis is focused on the idea that alcohol abuse is a medical and social problem that can be dealt with by a comprehensive treatment strategy, rather than only as a leadership problem that can be resolved through the use of severe disciplinary action. Each program staff member is assigned an area of the post and is responsible for initiating and maintaining working relationships with command and other unit personnel through a program of command consultation. There is evidence suggesting that the rapport established between project consultants and unit personnel is an important factor in the success of such a program (13). In addition, educational programs are conducted in conjunction with leadership training courses, at unit/battalion-level meetings, with hospital personnel, and in the school system for dependents.

A second role for Benning House is that of a linking agent within the health and social service delivery system in the civilian community. Attendance at community agency meetings, close liaison with local hospital facilities, and systematic follow-up of all alcohol abusers reinforce the idea that alcoholics are not ignored; the broad range of consequences within the community attributable to alcohol abuse also becomes more visible.

The third method is to provide a clearinghouse for information about alcohol and drug abuse. Staff members have appeared on local television programs and have been interviewed by several newspapers on various aspects of the program. Speakers from the staff are available to the military and civilian communities to discuss alcohol-related problems. Epidemiological surveys are furnished to commanders on the post to make them aware of the incidence and the demographic and behavioral correlates of alcohol abuse in their units.

Preventive services are generally conceptualized according to Caplan's description of primary, secondary, and tertiary prevention (14). Programs that disseminate factual material about the effects of alcohol and attempts to change attitudes about drinking as a symbol of manhood are seen as primary prevention, to reduce the incidence of problem drinking. Early case finding to identify abusers before their health and social supports have deteriorated irreversibly is considered secondary prevention. Programs to reduce residual disability (tertiary prevention) are undertaken to enhance the person's ability to function in civilian life and to ensure the availability of medical treatment for such conditions as brain syndromes, neuropathies, and cirrhosis to prevent further deterioration.

Research and Evaluation

With the assistance of the Computer Support in Military Psychiatry (COMPSY) staff, there have been two major types of efforts. One of these is a treatment evaluation system that can function as an integral component of the treatment process. This evaluation system has been designed but has not yet been implemented because of staff reluctance to maintain records that might cause damage to an individual's career.

The second effort is the epidemiological survey. A study has been completed estimating the level of incidence and attitudinal correlates of drug and alcohol abuse at Fort Benning based on the responses of 1,500 officers and enlisted men to a questionnaire (15). Data have also been collected on the degree of drug and alcohol abuse among 2,000 junior high and high school students in the area. Such assessments of the community provide the kind of information needed if we are to make informed decisions.

EVALUATION OF THE PROGRAM

More than 300 referrals were received for alcohol-related problems prior to the development of the formal Benning House program. No systematic case records or follow-up data are available, although highly visible examples of successful treatment were instrumental in mobilizing and maintaining community support.

With respect to the Benning House residential treatment program, data are available on the first 39 residents. (The maximum capacity of the house is 18; the number will be increased to 36 in order to accommodate the higher number of referrals as community acceptance increases.) All residents were male, mostly in the enlisted ranks (87 percent), on active duty (72 percent), and ranged in age from 19 to 61, with a mean of 40. Most residents were white (69 percent), had at least a high school education (66 percent), and were married (69 percent). About one-half were self-referred; the rest were referred by the resident's unit, family, or the hospital. Thirteen of the residents completed the 90-day residency program. Six were forced to withdraw because of family conflicts such as divorce proceedings in another state, and five withdrew because of orders to report to another post

or to retire from the service. Fifteen residents were dismissed from the program for drinking and not participating in house activities; they were perceived by other residents as blocking the program's effectiveness and were asked to leave the residential program. Successful residents usually continued in group therapy as nonresidents and participated in community activities. Two of them became counselors in the program. Unsuccessful residents were allowed to petition the staff for readmittance to the program.

While the number in the treatment program has been too small to allow for any conclusive statements, the demographic characteristics of the participants suggest several hypotheses that are important for future programs. First, all officers in the program were retired; none was on active duty status. This reinforces the notion that few officers will risk potential damage to their careers by disclosing their alcohol problem (10). Second, the percentage of black residents in the program was double the percentage of blacks in the post population. Blacks also had a higher rate of unit referrals than whites. This may reflect different racial patterns of drinking or the greater social visibility of blacks as problem drinkers. Third, almost one-half of the residents had a record of a previous arrest (49 percent). This suggests the usefulness of a systematic examination of arrest records, which might lead to early identification of a high-risk population who would serve as a target for primary and secondary preventive actions.

In addition to treatment evaluation, an important criterion of a comprehensive program is its ability to become identified within the community health and social service system as the agency responsible for drug and alcohol abuse and its ability to enhance and mobilize community awareness and support. As already noted, Benning House staff members have been invited to appear on local radio and television programs and to speak before various community groups. There have been more requests for community and medical consultations; requests for epidemiological investigations have increased; and staff members have been asked to teach aspects of alcohol abuse as part of the post leadership training courses. Staff members have testified before Congress (16) and participated in the establishment of a tri-service task force on alcoholism in 1971 in an effort to focus on institutional factors related to alcohol abuse. Such activities serve to enhance the areas of education and prevention and to broaden the potential impact of the program.

DISCUSSION

A number of factors can be identified from our experience as important to the development of a comprehensive alcohol program. One is the identification of core staff willing to become interested in alcoholism, to put aside old stereotypes, to learn about alcohol and its medical-social roles, and to relate to people with alcohol problems.

A critical factor is broad community support. Resources for innovative programs are difficult to obtain and especially hard to justify when a "bunch of drunks" are recipients of benefits during a time of declining troop strength. The community requires education to revise its attitudes about the nature of alcoholism in order to become aware that preventive and treatment programs can produce valuable human and economic results. At Fort Benning, field commanders, lawyers, chaplains, clubwomen, physicians, noncommissioned officers, and personnel specialists were brought together in sessions designed to broaden their understanding of problem drinking. They were made aware that only a small percentage of alcoholics fit the classic "bum" stereotype—that most people with drinking problems hold jobs and have families and that intervention with minimal stigmatization offers the greatest chance for success.

Also important is the need for staff stability. For the past few years the Army has experienced massive personnel turbulence. However, adequate time for staff and community development and for continuity of goals seems essential. If the military is to approach the problem of alcoholism with the seriousness it deserves, high priority at the service level must be placed upon duty stabilization of program staff.

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Male Transsexualism: Uneasiness

BY ROBERT J. STOLLER, M.D.

The author discusses sex reassignment in men. He points out that since 1953, when the procedures were first publicized, attitudes toward granting "sex change" have become increasingly liberal, resulting in a dearth of knowledge about the number of men who have received hormonal or surgical treatment; the frequency of surgical and postoperative complications and of morbidity and mortality; the nature and frequency of psychiatric complications; and the percentage of those treated who have benefited. Believing that sex reassignment should be restricted to the most feminine men, the author urges more scrupulous follow-up studies and more careful consideration of requests for change.

THE CARNIVAL ATMOSPHERE PREVAILING in the management of male transsexualism may have been unavoidable considering what a spectacular aberration this condition is. At any rate it is too late to back up. By now probably a thousand or so males have been "sexually transformed." (We shall never know exactly how many because of the clandestine arrangements used by some surgeons.) Should time prove that the rate of untoward results is acceptable in terms of the severity of the condition, then we shall rest comfortably, and such procedures will become an unremarkable part of medical practice. But while we await these follow-up studies, there is reason for uneasiness.

First, let me express the opinion, which is in disagreement with those who feel that "sex transformation" is never indicated, that there are extremely feminine males who can effortlessly pass undetected in society as females and for whom no known treatment exists that would render them masculine in behavior and appearance. In the absence of any such treatment we have three choices: 1) insist, nonetheless, that they be treated by some method which does not work (e.g., psychoanalysis); 2) do nothing, with or without moral exhortation; or 3) provide them with "sex transformation." I favor the third option for these patients.

COMPLICATIONS

The issue is complicated, however—more so than is usually acknowledged. Some years ago positions were polarized: A small number of physicians favored helping patients change sex roles, while a majority of people (of particular importance the medical profession, including psychiatrists) were opposed (1). Now, publicity and showmanship have reversed opinion, with a large part of the public and the medical profession comfortably, and unthinkingly, accepting the treatment.

Here the first complication arises: The patients themselves announce the diagnosis of transsexualism and expect physicians simply to perform the mechanics necessary for altering their bodies. This is odd, but more distressing are the referrals from medical colleagues who fail in their responsibility to diagnose the patient themselves but, rather, accept him as a transsexual simply because he has requested sex transformation. These physicians then want psychiatrists to arrange for the treatment; imagine: a diagnosis based on the treatment the patient recommends. This is terrible medical practice, mitigated for me only by the hope that it makes no difference who is "transformed" *if* all have happier lives. But we do not *know* that yet; we can *suspect* that some patients are not doing well postoperatively.

Following is a hypothesis that can be tested if proper follow-up studies are done: The more masculine a patient's appearance and behavior as an adult and the more masculine episodes he has had from earliest childhood on, the more likely he will have a psychic disorder after "sex change."

A second complication results from issues of diagnosis. Some believe transsexualism is fictitious, invented to permit homosexuals to escape their responsibility for being nomosexual (2) or to prevent the unmasking of a psychosis hiding behind a clever delusion (3, 4). These positions grow from the inadequate criteria used to define transsexualism. There must be a more admirable way to diagnose this condition than to say a person is a transsexual because he requests sex reassignment. I would rather attempt to diagnose by assessing the degree of femininity and its length of existence. To put this differently, how firm is the patient's conviction that he really is a woman trapped in a male body?[1] Since it has already been done elsewhere, I shall not describe the clinical, psychodynamic, and etiological features that help me make the diagnosis of transsexualism (5, 6). A sketch may suffice if the reader keeps in mind that a more complete ar-

Read at the joint meeting of the Danish Psychiatric, Psycho-Analytical, and Psychological Societies, Copenhagen, Denmark, May 4, 1972.

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[1] Of course, those of us faced with the task of diagnosing transsexualism have an additional burden these days, for most patients who request sex reassignment are in complete command of the literature and know the answers before the questions are asked.

gumcnt is to be found in these longer reports.

I have found the greatest femininity in males among those who have been feminine since earliest childhood and in whom no stage of masculinity has ever been observed. In such cases the mother has had a lifelong sense of worthlessness about being a woman that has driven her to want to be a male so intensely that during preadolescence she may almost have seemed a female transsexual. Following the changes of puberty, such a woman gives up hope and in time marries. Her husband is a distant, passive man and is never around the house to serve as a masculine presence. If this mother gives birth to a son who she feels is beautiful and graceful, she establishes an excessively close symbiosis with the child that excludes the father and persists for years. As signs of femininity appear in her son in the first year or so, she encourages them while snuffing out the slightest behavior she interprets as masculine. And so a genuine femininity is encouraged to appear from the first. It may not surprise us then if the son of such a person requests that his anatomy be changed to conform with his sense of himself as feminine.

To summarize my position regarding male transsexualism, if there is a group of people who more or less have the same clinical picture, dynamics, and etiology, one can properly consider them to belong to a clear-cut diagnostic category. Issues in treatment and in the search for etiology are only confused, however, if one throws many different clinical types into the same pot simply because all share one striking feature in common, i.e., the request for a sex reassignment, when they fail to share other features (6).

The following examples may illustrate my point.

CASE REPORTS

Case 1. This patient is the divorced father of two children, in his 30s, and in a profession that is practiced only by men and in which signs of femininity would lead to professional disaster. His appearance is masculine, not only because he is 6 feet 5 inches tall and weighs 250 pounds, but also because he is unable to carry himself in a feminine way. Nonetheless, since early adolescence he has secretly dressed for an hour or so at a time in women's clothes, becoming sexually excited and then masturbating. Despite his masculinity, he has recognized a wish to be a girl since mid-childhood. Beginning in adolescence, when he first started dressing in his sisters' or mother's clothes, he has told himself that he has two aspects, a girl's and a boy's. He has experienced the greater part of his life as a masculine-appearing man, inhabiting a male body; however, when he puts on women's clothes, he feels that he is a woman (although not a female) and that he has a woman's name. He does not believe that "sex change" will remove that part of his identity which is a man. Nonetheless, he demands this treatment since he believes his feminine aspect is enslaved inside his male body.

For years the patient could manage with intermittent cross-dressing; however, even though this was sexually gratifying, he began to yearn to reveal his femininity. Frustration of his desire made him severely anxious, and at times he slipped into a paranoid state with persecutory delusions. His next attempt at a "cure" was to try to find a masculine homosexual woman who would want to be transformed into a man and to marry her; then, each would trade roles. When he could not arrange this, he began thinking of sex reassignment. Not yet motivated to go through with the operation, however, he married, hoping either for a cure via heterosexuality or by spending more time in traditionally feminine activities, such as his wife's household chores. Although he could get erections and fathered children by fantasizing he had a vagina, this attempt—marriage—failed also.

With his marriage, the patient stopped seeing me. A few years later, he wrote to request an interview. A few minutes before the appointment he appeared, looking ashen and in shock. He had just incised the base of his penis in the bathroom across the hall. When the emergency was resolved, he told me how he had planned this exploit for weeks, having studied the anatomy of his genitals so he would not bleed to death inadvertently. He had hoped to force me, and thus the medical center, to give him an operation, although we do not have a program for such surgery.

Since the patient and I had always had a good relationship, I felt comfortable telling him that I would not be blackmailed in this matter. He apologized for having placed me in such a position but added that without the operation he would, regretfully, either blow up an airplane or poison the water supply of Los Angeles; he may have been technically equipped to do both of these. In addition he could barely resist running girls down with his car as they crossed the street to school.

Not forgetting his paranoid tendencies, I told him that on further consideration I could be blackmailed. This consisted of my condoning his dressing more frequently in women's clothes, prescribing a progesterone derivative (that has minimal feminizing effects), and standing aside as he worked to save money for the operation. Recently he arranged with a private surgeon for genital surgery. He calmed down, and the two years he has spent in this manner have been the happiest of his life. He bought a wig and women's clothes and for the first time began wearing them publicly during the day. He looks grotesque, but he is thrilled. Despite his mass, the blonde wig that does not fit, the bizarre makeup, the bulky walk, and his inability to carry himself in a feminine manner, he acts convinced that people think he is a normal female. He never appears at work as a female and has raised no suspicions there. In fact, the happy calmness that has overtaken him has led to the first professionally successful period in his life.

He says that after the operation he will continue to work and to spend his days as a man but that he can survive only if he has occasions to live as his womanly self. Let us hope he is right; this will be a better solution than another paranoid psychosis.[2]

Why call this patient a transsexual?

Case 2. This patient, who is in "her" 30s, divorced, and the father of two children, lived exclusively as a man until a few years ago. Having sensed a feminine quality since mid-childhood, he intermittently dressed in women's clothes throughout his teens, always becoming sexually excited. He lived for a few years with another man in an avowedly homosexual relationship in which he played both the masculine and feminine roles but preferred the feminine role. During his years in the military service, he had several homosexual affairs. In addition, he created and built a full-sized artificial man, which he kept hidden in an apartment. He made love to this man when-

[2] Beyond what I have said here, one may wish to contemplate further the morality of condoning a procedure with this patient because he threatened murder.

ever he could, placing the man's arms around him in an embrace and putting the man's penis in his anus. The patient also obtained pleasure from heterosexual affairs, and eventually he married.

In his late 20s, the patient spent several years as an armed robber whose spectacular feats were headline stories. This attempt to be manly ended when he was finally arrested; he spent many years in prison, during which time he decided that when freed he would live as a woman. I first saw him shortly after his release.

In time, he arranged for "sex change" and returned thrilled with the anatomical and psychological results. Although over six feet tall, he is sufficiently graceful to pass successfully as a woman, has been steadily employed, and has had boyfriends.

Should this patient be called a transsexual? Socarides reported the case of a similar patient whom he represented as the prototypical transsexual (2).

Case 3. This patient in his late 30s is married, the father of three children, and successfully employed in a typically masculine profession. He has never cross-dressed in his life, has never become sexually excited by handling women's clothes, and has never had homosexual relations. However, in recent years he has decided that he must have his genitals removed. During this time, he occasionally took estrogens, but whenever his breasts enlarged and his potency decreased, he became depressed thinking how he was hurting his wife. He finally decided to have the operation and to divorce his wife but still to support his family. He says he has no intentions of living as a woman.

Is this patient also a transsexual?

Case 4. This married man has never held a steady job because he has suffered from a schizophrenic thinking disorder since he was a teen-ager. When he was in his 20s, he decided he was a female. Nonetheless, he married a woman older than he was, because she felt she needed a husband. They had intercourse for a few months but ended this by mutual consent.

For ten years the patient wished for sex reassignment, insisting that he was a female. Unable to arrange for this, he moved away from Los Angeles; I have not seen him again. However, I did receive a letter from him in which he described how he had meticulously surgically removed both his testes in his bathroom. (The patient had had practical nurse's training.)

DISCUSSION

The list is endless. Anyone doing research on this subject has seen numbers of such people with the most varied personalities, having in common only their belief that a part of them is so feminine that it can be fulfilled only by "sex change." Some of these patients are primarily fetishistic cross-dressers; some, primarily effeminate homosexuals; some, primarily psychotic. The possibilities are endless. But if by inexorable logic they are all called transsexual and if that label is currently the only permit needed to grant sex reassignment, we have failed those patients for whom the operation is dangerous.

This detour into diagnosis promotes my argument: Until careful follow-up studies provide more adequate answers concerning who can safely be subjected to this massive surgical and psychological procedure, the most conservative and humane way to proceed, I believe, is to restrict "sex change" to the most feminine males. I believe that other workers can confirm my experience that all such patients pass silently, completely, and permanently into society as women.

Even if my proposition regarding etiology is wrong, perhaps this rule would still be the proper one to use. For instance, should it be proven that there is a specific biological cause for transsexualism, the wisest choice might still be to restrict the operation to the most feminine of males. They certainly give one the feeling that their femininity is firmly fixed and that their maleness can have no value to them.

Among those requesting help then, on whom should we not operate? I think that for the present time (although clinical judgment may force such rare exceptions as in case 1), we should exclude those who are psychotic, who have had psychotic episodes in the past, who are sorely depressed, who have had severe depressions in the past, who are currently married and have families, who have been married and were able to engage in intercourse with erections and orgasm, who appear to be masculine (by this I do not mean body build so much as manner of dress and behavior), or who for extended periods have appeared to be unremarkably masculine. We should also exclude the large group whose members, despite an ability to intermittently appear as feminine, have revealed throughout maturity that their genitals give them pleasure (e.g., fetishistic cross-dressers and effeminate homosexuals).

The rationale underlying the inclusion of this latter group of subjects (by far the largest number of people requesting "sex change") is that these men have significant, demonstrable masculinity and sense the value of their genitals, however much they also abhor them. In other words, these men have a history of valuing what they now propose to give up. One need not be a psychoanalyst to have seen people with ambivalence, one part of which is hidden until the other part is removed. Since it can be difficult to determine how highly a person prizes a given aspect of himself at a time when he denies it at the top of his lungs, we run risks in presuming that there is nothing of value to be lost. Until we can replace an amputated penis, we must be careful. Some physicians are familiar with the patient who has convinced a surgeon that "sex change" is indicated, indeed crucial; and yet the patient discovers postoperatively that he has made a mistake from which he cannot retreat. It is under these circumstances that we see the onset of psychosis, depression, suicidal intent, hopelessness, male homosexual prostitution, and even medico-legal complications.

Undoubtedly, however, there are many males, like those in my case reports, who would do better if granted "sex change." The problem is that we do not yet know how many will improve and how many will be harmed. We ought not be indiscriminant but, rather, we should establish criteria for accurate prognosis, not relying on anecdotes of good results and not minimizing those of bad results.

Now that I have rigorously restricted the diagnosis of transsexualism and suggested that we only operate on those who fit this diagnosis, how will we ever know what happens to the rest? With a bit of effort, we can probably obtain our answers from among the thousand or so such people already in society. Or we might set up an experiment to be carried out only by those medical centers in various countries which would be medically and scientifically responsible. In this experiment we could match categories reflecting the different clinical pictures, e.g., the transsexual, the transvestite, the effeminate homosexual, the mixed type. If only those who seem the most highly motivated were treated, we could then determine, with proper follow-up, whether those in one category did better than those in another or whether these concerns with diagnosis were not significant in the end results.

Can one argue that even without follow-up studies we can proceed without hesitation? This is how the medical profession has acted despite the example of such scrupulous teams as that at Johns Hopkins. At the least, changing a person's sex is no minor, benign surgical procedure, but rather one with significant surgical risks and with frequent postoperative complications. Any other new and potentially dangerous surgical procedure would have been tested more thoroughly. But there is something about the person who requests sex reassignment that brings out or attracts a lower level of medical performance in all areas of evaluation and treatment.

"Sex change" has profound implications that touch on everyone's vulnerability to magic; and in the management of would-be transsexuals the magic and mystery of the condition seem to act as an excuse for relaxing normal medical prudence. Worse, the treatment attracts some who are not medically prudent to start with. We all know of surgeons who are willing to operate as long as the price is right; they seem scarcely concerned even when they are inexperienced. We know of psychiatrists as well as other physicians who put themselves in the position of psychiatrists whose only criterion for recommending surgery is the shrillness of the patient's request. They are unconcerned about and unequipped to properly evaluate the patient's personality; they are equally uninterested in doing the follow-ups we so badly need. So far, there has been almost no protest about this state of affairs from those of us who know these patients best.

CONCLUSIONS

Since 1953, when procedures for "sex change" were first publicized (7), an unknown number of males have received hormonal and surgical treatment on request. That we have no notion how many have been treated when the procedures are experimental and potentially dangerous is astonishing. That we do not know, almost 20 years later, how the patients fared is scandalous. Only two workers have reported careful follow-up studies of more than single cases.[3] In 1969, Randell published results on 29 males and six females (9), which he extended in 1971 to 44 males and eight females (10). The Johns Hopkins team, the first to set up a well-planned program for sex reassignment, has published one report on 17 male and seven female patients. Originally done in German in 1970, Money later summarized this study in English (11). We do not know the frequency of surgical complications, postoperative complications, morbidity, or mortality. We know little of the nature and nothing of the frequency of psychiatric complications. We do not know what percentage of patients benefit from the procedures nor has anyone even published a competent rating scale to assess benefit. Except for anecdotes, we do not yet know what the passage of years does to these patients.

This is too primitive.

Can we not devise ways to control this runaway process? I believe that setting up programs for treatment ought to be the responsibility of the university medical centers—I think these experimental procedures should be restricted to the universities—not only to practice the finest medicine and to develop proper instruments to measure pre- and postoperative results, but also to exert effort to prevent incompetent and uncaring practitioners from treating these patients.

Finally a closing thought: the conclusions in this paper hold for females as well as males.

[3] Benjamin also has reported his impressions, but he did not try to establish precise criteria for rating the results (8).

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Playroom Setting for Diagnostic Family Interviews

BY IBRAHIM N. ORGUN, M.D.

The author describes the use of a playroom setting for diagnostic family interviews in which play therapy and family interviewing techniques are incorporated. By using this method the diagnostic team can accumulate valuable diagnostic data on the family, while causing the least discomfort and stress to the children. The method also acquaints the parents with the use of the playroom and play materials in play therapy. After having used this technique for two years, the author believes that it could easily be adapted to family therapy for families with young children.

THE CONTRIBUTION OF FAMILY INTERVIEWS to the diagnostic understanding of the family and the identified patient is well established. However, the role of younger children in family interviews conducted on a verbal level has not attracted much attention. Those familiar with children and child development are well aware of the difficulty and discomfort that children younger than ten years of age experience in family interviews that are conducted in an office, where the primary mode of communication is verbal and on the adult level. These same children, however, find the playroom and play material conducive to communicating their conflicts and feelings. This consideration, combined with the aforementioned concerns, makes the playroom an ideal setting for interviewing families with children ten years of age and younger. In our experience with 70 families, even some children between ten and 12 years of age felt more comfortable in a playroom setting.

REVIEW OF THE LITERATURE

Having a parent, especially the mother of the child patient, in the playroom is not new. Schwarz described the psychoanalytic treatment of two children while their mother was in the playroom (1). Pappenheim and Sweeney treated a child with the mother in the playroom because of the separation anxiety that both the child and the mother experienced (2).

Others included home visits in the diagnosis or treatment of children. Bornstein treated a two-and-a-half-year-old child by visiting the patient at her home (3). Freeman found home visits to be very valuable in diagnosing children (4).

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Drechsler and Schapiro (5) described a three-step family interview procedure that included: 1) a psychiatrist's interviewing a family in a playroom while a psychologist observed through a one-way screen; followed by 2) a ten-minute period when the family was left alone while the psychiatrist and psychologist observed through the one-way screen; and 3) a final period when the psychologist introduced a questionnaire and remained with the family as they answered it while the psychiatrist observed through the one-way screen.

Augenbraun and Tasem (6) described two different techniques of family therapy for preschool children and their parents in a play-therapy room. Differences in techniques were related to the makeup of the parents, specifically whether they were neurotic or borderline and psychotic. Bergel and associates (7) presented the use of play materials in conjoint family therapy. Ackerman (8) aptly dealt with the importance of the child's participation in family therapy and suggested techniques to ensure it.

Our approach comes close to the techniques described by Augenbraun and Tasem (6) and by Bergel and associates (7). However, it differs from theirs in that it uses the child's play and activities as a starting point and focuses on the child's communication. In short, communication through play activity and material constitutes the primary communication mode, at least for the children.

THE TECHNIQUE

The diagnostic family interview is part of the diagnostic process, which also includes interviews with the parents, individual interviews with the child, psychological testing, and, when indicated, electroencephalography. During their individual interviews with a social worker and a child psychiatrist the parents and the child are each told that they will be seen as a family so that the diagnostic team can get to know how the family functions. The family diagnostic interview is held about a week after the child's psychiatric interview. The social worker and the child psychiatrist meet with the entire family in the playroom. The child, who is familiar with the clinic setting, is frequently asked to lead his family there; his handling of this task offers diagnostic clues.

Our playroom has enough chairs for adults and teenagers. The family members choose their seats; how they seat themselves gives clues about the sidings and groupings in the family. Once the older members of the family are seated, the members of the diagnostic team place themselves among the family in a way to make it possible

for each of them to observe and interact with all members. We have found that if the team does not initiate the interview by making a verbal statement, there is a better chance for the interview to proceed on play and activity levels; any verbal statement from the team tends to communicate that the interview should proceed on an adult verbal level. However, in cases where prolonged uneasiness and anxiety are experienced, the original statement that the team wanted to see the family together is repeated. In the majority of cases, the child patient or the siblings have begun playing and the interview has proceeded smoothly. If the children did not play or interact with each other and the adults, we have found that it was more revealing and effective to explore the reason for this with the parents than to encourage the child to play. An example follows.

Case 1. A ten-year-old boy, Michael, who was referred because of poor school work, throwing away his books, general disobedience, and running away from home, was seen in the playroom with his divorced mother and his eight-year-old sister, Nancy. Both children sat rigidly, without moving; they glanced at their mother. When this was pointed out, the mother indicated that the children never did anything unless she told them they could. With her permission they started to play, but even then they waited for her nonverbal cues as they moved from one activity to another.

As an interview proceeds the social worker and psychiatrist move around and, if invited, join in the children's play. They interact verbally with the older members of the family, inquiring about their reactions, feelings, or interpretations of the child's interaction or activity. They may encourage the older members of the family, especially the parents, to join in the children's activities. The interaction in these instances is quite revealing.

Case 2. A six-and-a-half-year-old boy, John, his four-year-old sister, Judy, their mother, and their stepfather of a few months were interviewed. At one point the stepfather complained that he wanted to do things with John but that the boy rejected his offers. A few minutes later, John asked him to play a game. First the stepfather, who accepted this offer, remained seated in his chair while the boy sat on the floor. This created a gap and made it uncomfortable for both.

At one point both of their playing pieces landed on the same square, the stepfather's arriving last. The stepfather told John that he had to go back to the start. The boy insisted that the rules contained no such move, but the stepfather would not accept this. One of the diagnostic team members suggested that they might want to read the rules. However, the stepfather did not take this suggestion, the boy stopped playing, and communications broke down. At this point, the mother took the game cover that contained the rules and read them. Realizing that her husband was wrong, she seemed to become very angry. But paralyzed with anger, she put the cover back without saying a word.

Frequently the child psychiatrist interacts with the children and a social worker interacts with the parents. However, these roles are switched as often as the team sees it is necessary during the 50-minute interview. As the interview proceeds, the play and verbal interactions among the members of the family are observed and scrutinized.

While observing John and his sister Judy, mentioned in case 2, one of the team members overheard Judy say to her brother that she had the white wooden doll. (They were both playing with different colored dolls; there was only one white doll.) As soon as Judy said this, John grabbed the white figure. The little girl began crying and protesting. The mother, not realizing that Judy had initiated the interaction, scolded the boy. In this instance, we should see the little girl's manipulation and understand why the boy struck out at his peers and those adults who tried to control him.

The team comments on the nature of divisions, sidings, and conflicts among the members of the family. At the end of the interview they attempt to relate the presenting problem of the patient to the family and to explain its functioning.

FINDINGS AND CONCLUSIONS

Two years of experience have shown that use of the playroom for diagnostic interviews of families with young children leads to the unfolding of more diagnostic data in a much less stressful atmosphere than an office setting. The children find the play material conducive to revealing information, some of which may be important.

Case 3. In a family interview that included the patient, Larry, age 12, his sisters, ages ten and five, and their separated mother, the ten-year-old created a violent fight between the mother and father puppets. At the end of the fight the mother puppet asked the father puppet to leave and to take the children with him. Since the mother had told us she did not know why her husband had left her, this piece of play activity was very revealing.

By meeting in the playroom, the adults communicate their willingness to listen to the children. They enter the child's world and meet him on his level. Meanwhile the diagnostic team observes the interaction between the parents and children and among the children themselves, which is very much like that in everyday life. In an office setting we only hear about this interaction or, at best, listen to its verbal aspects.

Case 4. At the beginning of this family diagnostic interview centered around a six-year-old boy named Richard, who was known to have coordination and learning problems, his father asked him to draw his (the father's) picture on the blackboard, thus setting a goal that could not have been attained. As the child struggled, the father made manifest his disappointment on the one hand and his inability to accept the child's limitations and to support him on the other.

Since the material revealed by the children is through play and activity, the examiner can choose not to focus on it in order to keep the child from becoming anxious. In contrast, the child cannot be protected from discomforting anxiety in an office-type interview. When an anxiety-provoking situation does take place in the play-

room, the play material is available to help the child deal with his anxiety.

Judy (cited in case 2) found the little girl and father puppets helpful in dealing with her anger and anxiety over the disagreement between her brother John and her stepfather about the game rules. She made the little girl puppet hit the father puppet, saying, "Don't hurt my brother."

Playroom equipment offers situations that may be helpful in understanding the parents' personalities as well. For instance, parental reaction to finger paints and aggressive toys like guns provides us with opportunities for better understanding that could not be duplicated in an interview held in an office setting.

Case 5. After observing her son's attraction to a toy gun, the borderline mother of four-year-old Jimmy, who was referred because of aggressive behavior, expressed her disapproval and with it her own problems with aggression. She reproached the child psychiatrist, saying that the gun and darts explained why her son had told her that he liked the doctor following his individual interview. When she recognized her feelings, she admitted that she would never allow toys like darts or guns in her house.

Case 6. Another mother, who had had psychotic episodes, used an alligator puppet with large sharp teeth to interact with her three-year-old daughter. Speaking for the alligator, she brought the mouth of the puppet to the child's, saying, "I want to kiss you." Her confusion about love and aggression could not have been better expressed.

Almost all parents welcomed the family interview. They felt, as did the diagnosticians, that it would provide a better picture of the family and the identified patient. Furthermore, they liked the idea of meeting the child psychiatrist with whom they otherwise would have had no contact.

We felt that meeting in the playroom had one more distinct advantage. Most parents have difficulty understanding play interviews and play therapy. The usual interpretation is that they are suspicious or jealous of their child's relationship with the therapist. Nevertheless, in some cases, if not in all, this question is realistic and justified. One cannot think of a better way to acquaint the parents with play interviews than to have them observe and participate in them.

The family's functioning in the diagnostic family interview is the most helpful prelude to family therapy. It can be used effectively in deciding the mode of therapy for the family.

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Psychiatric Treatment for Nursing Home Patients: Drug, Alcohol, and Milieu

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Following a four-week control period, 64 nursing home patients receiving doxepin, other psychoactive drugs, or no medication were placed on an alcohol regimen of beer or wine in the ward or in a simulated pub setup. The alcohol produced significant improvement in all groups, especially the doxepin group. However, the pub milieu did not demonstrate a significant superiority over ward milieu. The authors suggest that the pub milieu should be used as a catalyzer, rather than as an independent treatment modality, to facilitate the alcohol therapy.

ALCOHOL AS A THERAPEUTIC AGENT for psychiatric patients has received scant attention from researchers and clinicians in spite of the fact that alcohol has been used for thousands of years as both a medicine and a euphoriant. Around the turn of this century, Emil Kraepelin used alcohol, which was christened as "Kraepelin Liquor," in the treatment of mental patients (1). In the last decade only a dozen papers have been published on this subject, even though positive results were reported by several investigators (2–13). Kastenbaum's group (6, 7), for instance, gave wine or beer as a form of tender loving care (TLC) to geriatric patients and observed that they became more sociable, were less incontinent, and required less medication.

One of us (C-p.C.), in a controlled study on a geriatric psychiatric ward, compared the relative efficacy of beer, fruit punch, and fruit punch with thioridazine in a pub milieu, as well as thioridazine on the ward (13). The group receiving beer sociotherapy showed the greatest behavioral improvement, while the drug group ranked second, regardless of the milieu in which the drug was administered. The fruit punch group showed the least improvement despite the fact that it was exposed to a cheerful pub milieu. Thus Chien postulated that the overall efficacy of beer therapy was due to more than TLC alone and was probably a result of the total interaction of the pharmacological property of alcohol and the psychosocial and cultural expectations and experiences associated with drinking beer in a pub-like group setting.

The following questions were raised as a logical consequence of Chien's study. To what extent would beer or wine per se, without the pub milieu, improve the patient? How much does the pub milieu contribute to the beneficial effects of alcohol in geriatric patients? What is the interaction of alcohol and psychotropic drugs? Furthermore, can the pub social therapy, which appeared to be beneficial for the geriatric patient in the mental institution, be applied successfully to elderly persons residing in nursing homes?

Nursing homes have for the most part lacked the resources for providing their patients with active programs of recreation, rehabilitation, and group activities. Since there are over one million patients in nursing homes in this country, the demonstration of a significant therapeutic effect in one or more of these modalities at a reasonable cost could have implications for the treatment of geriatric patients in such institutions.

METHOD

Setting

Two nursing homes with a combined population of 296 patients in the metropolitan area of Boston were selected for the study. These homes were selected because their patients came from a wide range of socioeconomic and ethnic groups and were referred to the homes from a variety of settings.

By law, all the nursing home patients had their own private physicians who were responsible for their medication. These private physicians were general practitioners from the local community. There were well-supervised, well-organized nursing services in the two nursing homes. When this research proposal was presented to the nursing home personnel, discussions were held at various levels, including the administrators, volunteers, occupational therapist, patients, and the general practitioners affiliated with these nursing homes. After thorough consideration the two nursing homes decided to participate in the pub social therapy study.

In one nursing home a former chapel was transformed

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This work was supported in part by Public Health Service research grant MH-16128 from the National Institute of Mental Health and by a grant from the United States Brewers Association.

The authors wish to acknowledge the assistance of Mr. W. Haskell and Ms. V. Copeland of the National Health Services, Inc., the physicians and staff of the Martin and Commonwealth Nursing Homes, and Mr. J. Gillis of the C. Pappas Company, who donated the wine for the study.

TABLE 1
Demographic Comparison of the Three Groups, in Percentages

Variable	Group 1 Doxepin (N=13)	Group 2 Doctors' Choice (N=30)	Group 3 No Medication (N=21)	Total (N=64)
Sex				
Male	46.2	43.3	66.7	52.1
Female	53.8	56.7	33.3	47.9
Diagnosis				
Functional psychotic disorder	61.5	56.7	9.5*	42.6
Organic brain syndrome	30.7	30.0	52.4	37.7
Other medical disorder	7.8	13.3	38.1	19.7
Source of referral				
Psychiatric	61.5	73.4	28.6*	54.5
General	23.1	20.0	42.9	28.7
Nursing home	—	3.3	4.7	2.7
Private home	—	—	23.8	7.9
Other	15.4	3.3	—	6.2

*$p < .01$.

into a pub ("The Red Hen") with accommodations for 25 people. In the other nursing home a storage room on the first floor was converted into a pub ("The Owl's Nest") that accommodated 30 people. Both these pubs resembled commercial pubs in the community; they had a bar counter, candles, chairs, tables with checkered tablecloths, music, and walls decorated with posters and chianti bottles. The pub setting brought a fresh, exciting atmosphere to the residents that was also appreciated by their visitors.

Subjects

The patients in the nursing home were recruited by their own private physicians and nursing supervisors, using the following criteria:

1. Those who were considered able to remain throughout the study period (eight weeks).
2. Those who had some manifestations of emotional difficulty independent of the existence of a previous psychiatric diagnosis.
3. Those who were willing to participate in a study involving regular ingestion of alcoholic beverages.
4. Those without active manifestation of the following disorders: acute myocardial disease, severe renal or hepatic disease, neurological evidence of cerebrovascular disorder, uncontrolled diabetes, and past or present alcoholism.

Seventy-one patients were finally approved for participation in this study. Of the 71 who started the study 64 were able to participate throughout the entire study period. Seven patients dropped out for various reasons: Five did not consume the alcohol during most of the study because they did not like the type of alcoholic beverage we served, and two dropped out due to unexpected physical illness that was unrelated to the study.

Of the 64 patients, 33 were men and 31 were women, with an average age of 69. The initial plan had been to place all study patients on doxepin or placebo. However, the nursing home physicians were unwilling in many instances to either discontinue a patient's existing psychoactive medication or to have doxepin prescribed for some patients not currently on medication. For these reasons random assignment to drug treatment was not possible. Only the 13 patients (group 1) considered to be pathologically depressed, and for whom antidepressant treatment was judged to be indicated, were therefore placed on doxepin; they are referred to as the doxepin group. Most of the patients in this group had been on tricyclic antidepressants prior to the study period. No psychotropic medication other than doxepin was administered to this group during the study period.

The 30 patients in group 2 had been on various psychotropic medications prior to the study because of various psychiatric problems. The patients' private physicians felt that these medications were optimum both in terms of choice of drug and of dosage. These patients were called the doctors' choice group. They remained on

TABLE 2
Prestudy Scores on GRS, NOSIE, and Zung Self-Rating Depression Scale

Rating	Group 1 Doxepin	Group 2 Doctors' Choice	Group 3 No Medication
GRS	12.8	13.1	13.9
NOSIE			
Total assets	77.8	70.9	71.9
Factor 1	14.8	15.0	13.0
Factor 2	10.9	9.1	10.4
Factor 3	10.9	12.1	11.3
Factor 4	3.1	4.5	3.6
Factor 5	1.5	2.6	1.5
Factor 6	3.2	3.8	4.0
Zung Scale	50.6	52.9	47.2

their prestudy medications for the whole study period.

Group 3 was composed of the 21 remaining patients, who were considered not to require any psychotropic medication by their private physicians. They had not been on any psychotropic medication for at least six months prior to the study and remained so throughout the study period. They are therefore referred to as the no medication group.

Thus the three groups were preselected according to the judgment of the nursing home medical staff. Our original expectation was that these three groups would differ significantly in psychopathology, but this was not borne out by the baseline evaluation data (see below).

Even though the psychopathological scores for these three groups did not differ significantly, there were some demographic differences between the no medication group and the other two medicated groups.

For instance, the no medication group, which had a mean age of 72.8 years, was significantly older ($p < .05$) than the doxepin and doctors' choice groups (mean ages = 65.4 and 68.6 years, respectively) and was more likely to carry a primary organic diagnosis. More than two-thirds of the no medication group had been referred to the nursing home from a source other than a mental institution, while only one-third of the medicated patients came from such sources (table 1). The doxepin group was similar to the doctors' choice group in terms of demography and past history of medication. One of the initial aims of the study was to compare the clinical efficacy of doxepin with that of various conventional psychotropic drugs administered to the patients in the nursing home.

TABLE 3

Net Amount of Change in GRS and NOSIE Scores Using Prescore as Baseline Prescore Minus Score at the End of Each Period)

Rating	Group 1 Doxepin	Group 2 Doctors' Choice	Group 3 No Medication
End of first month (nonalcohol period)			
GRS*	+0.8	−1.6**	+0.2
NOSIE			
Total assets***	−1.6	−2.6	−1.5
Factor 1***	−0.8	−0.3	−1.9**
Factor 2***	+0.2	+1.0	+1.1†
Factor 3***	−0.3	+0.4	+0.1
Factor 4*	+0.5	+0.9†	−0.3
Factor 5*	−0.4	+0.5	+0.1
Factor 6*	+0.4	+0.7†	+0.8**
End of second month (alcohol period)			
GRS*	+4.0††	−0.2	+2.2**
NOSIE			
Total assets***	−7.1	−5.7**	−3.8†
Factor 1***	−2.2††	−0.7†	−2.0**
Factor 2***	−0.3	+0.5	+2.2**
Factor 3***	−0.9	−0.4	−0.1
Factor 4*	+1.2†	+1.1**	+0.6
Factor 5*	+0.5	+0.9**	+0.5††
Factor 6*	+1.7**	+1.1**	+1.0**

*A plus score indicates improvement.
**Significantly better than baseline ($p < .01$).
***A minus score indicates improvement.
†Significantly better than baseline ($p < .10$).
††Significantly better than baseline ($p < .05$).

Treatment Schedules and Ratings

The study lasted eight weeks and was divided into two periods of four weeks each. The first four weeks were considered a control period (nonalcohol period) during which the first group received doxepin in doses of from 25 to 300 mg. per day, the dosage being adjusted for each individual patient by the private physician in consultation with the senior author. The second group continued to receive medication at the doses prescribed by each patient's private physician. The third group received no medication.

The second four weeks (alcohol period) involved the random division of each of the three groups into two subgroups. One subgroup received either a can of beer (12 fluid ounces) or a glass of wine (3 fluid ounces) each afternoon from 1:30 to 2:30 p.m. Monday through Friday *on the ward.* The second subgroup received the same amount of beer or wine *in the pub* at the same time that alcohol was dispensed to the ward drinkers. During the alcohol phase, all three groups remained on the same medication or no medication schedule as had prevailed during the nonalcohol period.

The first ratings were obtained just prior to the initiation of the study. The second ratings were done at the end of the four-week control period (end of nonalcohol period). The third ratings were made at the end of eight weeks (end of alcohol period). All of the ratings were carried out by the same head nurses throughout the study. Raters were trained in the use of rating scales prior to the study, which assured that high reliability existed among the raters.

Instruments Used

The following measures were used:

1. A revised form of the Geriatric Rating Scale (GRS) by Plutchik and associates (14), consisting of 27 items. These items are rated from 0 to 2, and a total score represents the sum of the individual item scores. Higher scores indicate greater behavioral impairment or disturbance.

2. The Nurses' Observation Scale for Inpatient Evaluation (NOSIE). The scores from the NOSIE (15) that were employed for analysis were the total assets score and the scores of factors 1 through 6 (social competence, social interest, personal neatness, irritability, manifest psychosis, and retardation, respectively).

3. A five-point rating scale to measure social activity in the pub and ward settings during the hour when alcohol was served. Ratings ranged from 1, which denotes maximum social participation and group leadership, to 5, which denotes withdrawal from the group and little or no participation. This scale was completed by nursing personnel who actually observed the patients both on the ward and in the pub settings while they were drinking their beverage.

TABLE 4
*Differential Effects of Alcohol Consumption on the Ward Versus in the Pub (Three Groups Combined)**

Rating	Pub	Ward
GRS	1.85	1.06
NOSIE		
Total assets	-5.45	-3.70
Factor 1	-1.97**	-0.81
Factor 2	0.45	1.42
Factor 3	-0.39	-0.42
Factor 4	0.88	1.09
Factor 5	1.00***	0.35
Factor 6	1.70†	0.74

*Figures were obtained by deducting the third rating scores (end of pub and ward drinking) from the first rating score (prestudy score).
**$p < .10$.
***$p < .05$.
†$p < .025$.

4. The Zung Self-Rating Depression Scale (16). This was not included in the original design but was used in order to investigate whether there were any differences in the depressive features among the three groups. This self-rating scale was used only for the initial rating and not for the subsequent ratings because of difficulty in gaining patient cooperation.

A record was kept of any adverse reactions or unusual behavior that occurred during the course of the eight weeks. Since this was an open study, the senior investigator would investigate each report by examining the patient and discussing the findings with the staff.

The data were analyzed at the Harvard University Computer Center using an analysis of variance technique based on difference scores, or t test where appropriate.

RESULTS

Pretreatment Measures

Despite the fact that the patients in the three treatment groups were selected nonrandomly on the basis of their past medication, history, and availability for inclusion in a doxepin group, they showed no significant differences in any of the eight major criterion measures on the GRS and NOSIE. Although the doxepin group had presumably been selected because of a preexisting depression, analysis of variance on the scores on the Zung Self-Rating Depression Scale showed that all three groups averaged a mild level of depression (equivalent to "depressed-outpatient" level), with the doxepin group falling in an intermediate level between the two other groups (see table 2).

Results at the End of the Four-Week Baseline Period

During the first four weeks of the study the doxepin group received increasing doses of this antidepressant drug. The other two groups stayed on their previous treatment regimen. The doxepin group showed no significant changes during this first period. The doctors' choice group showed a significant deterioration in the GRS scores and a trend toward improvement on the irritability and retardation factors of the NOSIE. The no medication group showed significant improvement on the social competence and retardation factors of the NOSIE (see table 3).

Changes During the Alcohol Treatment Period

After four weeks of exposure to beverage alcohol in either the ward or the pub setting, a somewhat larger number of significant differences were observed, comparing the scores on the criterion measures at eight weeks with those at the pretreatment period (see table 3). There was a general increase on the total asset score on the NOSIE, ranging from a trend toward improvement in the no medication group to a significant improvement in the other two treatment groups. Of the eight criterion measures used, five showed significant change or a trend toward significant change in each of the treatment groups. Although almost all changes observed were in the direction of improvement and almost all significant changes were in the direction of improvement, differences between the three treatment groups were not striking. The doxepin group did, however, show more improvement on the GRS score and on the total asset score of the NOSIE as well as on five of the six NOSIE factors.

As can be seen from table 3, the magnitude of the change during this second four-week period, during which beverage alcohol was administered once a day, was relatively larger than the change during the initial baseline period. Statistical significance of the superiority of the alcohol period to the nonalcohol period was examined by the paired t test, which compared the changes obtained in the nonalcohol period to those of the alcohol period. Again, significance or trend toward significance, almost all in favor of the alcohol period, was noted in four to six of the eight criteria measured in each of the three groups, with the doxepin group ranking highest in improvement.[1]

Differential Effects of Alcohol Consumption on Ward Versus Pub

The effects of alcohol therapy administered in two different milieus were compared between ward drinkers and pub drinkers with three groups combined. On the eight major criterion measures used, the patients consuming alcohol in the pub setting showed more improvement than the patients receiving it on the ward on all measures but the NOSIE factors of irritability and personal neatness. Significantly greater change favoring the pub setting, however, was observed only on the NOSIE factors for social competence, manifest psychosis, and retardation (table 4).

When changes within the doxepin, doctors' choice, and no medication groups are examined, contrasting re-

[1]Copies of a table giving detailed data are available from the authors on request.

TABLE 5
Patients' Subjective Assessment of the Pub Sociotherapy, in Percentages

Question	Yes	No	Uncertain
Did you enjoy the pub?	86.8	13.2	0
Do you think the pub social meeting helped you?	80.3	19.7	0
Would you like to see this program continue?	88.5	8.2	3.3

sponses between those patients in each group receiving an alcoholic beverage in the pub with those receiving it on the ward, a similar pattern is obtained. Again, the magnitude of improvement is generally slightly to somewhat greater in the pub setting than in the ward setting. This trend is least evident in the doxepin group.

Out of 24 tests of significance comparing change in the pub drinking with change in the ward drinking within each medication group, only two statistically significant differences were found. The no medication group improved significantly more in manifest psychosis in the pub setting, while the doctors' choice group improved significantly more in retardation in the pub setting. There was a trend ($p < .10$) in favor of the pub setting for the doctors' choice group in total assets on the NOSIE and for the doxepin group in social competence.[2]

Activity Score in the Pub and on the Ward

A comparison of the pub and ward drinkers for social activity scores during the drinking hours revealed more activity in the pub (mean average = 2.8) than on the ward (mean average = 3.3). This difference was significant ($p < .005$). Obviously, the pub had social facilitation value during the drinking hours.

Patients' Assessment of the Pub

The patients receiving the alcoholic beverage in the pub setting were asked whether they enjoyed the pub, whether they thought the pub social meeting helped them, and whether they would like to see the program continue. As noted in table 5, over 80 percent of the group responded positively to each of the three questions. Since the questionnaire was administered primarily to aid the nursing home administrators in deciding whether permanent pubs should be set up when the study ended, information on the patients' attitude toward ward drinking was not obtained.

Analysis of types of drinks preferred revealed that more than half of the population (59.4 percent) ordered beer, with proportionately more men preferring this beverage. A total of 26.6 percent preferred wine and 14 percent were equally satisfied with both. It should be noted that the study was carried on in the summertime and that there were only two kinds of drinks—beer and wine—served for the purposes of the study.

[2] Copies of a table giving detailed data are available from the authors on request.

DISCUSSION

The major aim of the study was to evaluate the contribution of the pub social milieu to the benefits of receiving a drink of beer or wine among geriatric patients in a nursing home. As shown in our findings, the pub drinking was liked by the majority of the patients and facilitated more social interactions during a short period, but did not demonstrate a strikingly significant superiority over ward drinking on the NOSIE and GRS. The beneficial value of pub milieu in the alcohol therapy is limited as far as sustaining effects on behavioral change are concerned. This finding is somewhat similar to that of Greenblatt (17) and May (18), who demonstrated that milieu therapy provided little impact on schizophrenic patients when it was compared to drug therapy. Thus the pub social milieu could be used as a catalyzer, rather than as an independent treatment modality, to facilitate the alcohol therapy.

Within the larger study population, a group of 13 patients had been selected by their private physicians and the nursing home staff to receive doxepin, a new antidepressant drug. Although this group did not appear either more depressed on Zung's depression scale or more impaired on the GRS or on the NOSIE ward behavior scale than did the other two groups of patients studied, they did in fact show somewhat more improvement on the criterion measures during the second four weeks of the study. They also showed slightly less difference in relative response to the pub or the ward setting than did the other two groups. The clinical change observed in this group can be considered to favor the premise that doxepin may be of some value in patients of this sort, particularly when it is combined with a euphoriant such as alcohol. More vigorous claims for the therapeutic efficacy of doxepin cannot be made on the basis of the present study since patients were not randomly assigned to doxepin or other treatments, and the doxepin group may well have differed from the other treatment groups in ways not accounted for by the measures recorded during the study.

In an earlier study involving predominantly Irish patients, one of us (C-p.C.) demonstrated the efficacy of alcohol in a pub setting on the chronic geriatric wards of a public mental hospital (13). The present study extends this work to a nursing home with various subcultural populations and again provides evidence supporting the value of this ancient and culturally valued drug in the treatment of geriatric patients in nursing homes as well.

SUMMARY AND CONCLUSIONS

Sixty-four nursing home patients were studied for eight weeks—a four-week nonalcohol period and a subsequent four-week alcohol period. They were allocated to three treatment groups: a doxepin group, a doctors' choice group whose members received various psy-

chotropic medications considered to be optimal by their private physicians, and a no medication group. Although these three groups were preselected by their physicians for their treatments and one might assume that they would differ from each other, objective rating scale data (GRS, NOSIE, and Zung's Self-Rating Depression Scale) did not show any difference among the three groups in terms of psychopathology.

In the first four weeks, the nonalcohol period, all three groups failed to show significant improvement. The doctors' choice group deteriorated significantly on the GRS.

In the subsequent four weeks, the alcohol period, all groups received beer or wine once daily in addition to the previous treatment condition; half of each group, by random division, was served in the nursing home pub and the other half in the ward setting.

Regardless of the setting, the introduction of alcohol was associated with significant improvement in all groups in various aspects of the rating scales. Both ward and pub subjects showed significant improvement. Comparison of the pub versus ward drinking revealed that pub drinking was better than ward drinking in only four of 24 sets of comparisons. Thus the beneficial value of the pub milieu in alcohol therapy was limited, at least when its long-acting effect was examined. During the alcohol period, the doxepin group had a trend toward greater improvement than the other two groups.

There were no serious side effects noted with combination of drug and alcohol at the dosage prescribed. The attendance rate at the pub was 85.5 percent, an unusually high popularity for any psychiatric treatment available for this aged group. Thus pub milieu should be used as a catalyzer, rather than as an independent treatment modality, to facilitate the alcohol therapy.

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The Effect of Interview Language on the Evaluation of Psychopathology in Spanish-American Schizophrenic Patients

BY LUIS R. MARCOS, M.D., MURRAY ALPERT, PH.D., LEONEL URCUYO, M.D., AND MARTIN KESSELMAN, M.D.

Psychiatric ratings of ten schizophrenic patients whose native language was Spanish disclosed more psychopathology when the patients were interviewed in the English language than when they were interviewed in Spanish. Some evidence suggested that there were clinically important changes in the patient attributable to his problems in speaking in a second language. The clinician's frame of reference must also be taken into account: what is applicable to native English-speaking patients cannot be directly applied to the evaluation of persons from other cultures.

AT BELLEVUE PSYCHIATRIC HOSPITAL, as in many other urban centers, Spanish-speaking patients comprise a significant proportion of the patient population (1, 2) while Spanish-speaking psychiatrists are uncommon. As in many psychiatric facilities, it is a frequent practice to have patients whose mother tongue is not English evaluated by psychiatrists who speak only English. If the patient is able to communicate at all in English the examination is done in this language. Only if the patient is entirely non-English-speaking might an interpreter be used. Our purpose in the research reported here is to assess the influence of interview language on the psychiatric evaluation of schizophrenic patients whose native tongue is Spanish.

A number of authors (3–7) have pointed out the need for mental health professionals who possess both fluency in Spanish and a sensitive understanding of the Spanish-American culture. It is difficult to measure the sensitivity of a clinician to an unfamiliar culture, and it is not surprising that there has been little direct experimental work studying this issue. However, the sheer ability to speak a language is less elusive to measurement and, considering the emphasis on communication dysfunction in some theories of psychopathology, it is surprising that the role of interview language in the assessment of pathology in bilingual patients has received very little experimental attention.

We could find only one report on this topic. In this report, Del Castillo (8) described several clinical experiences in which Spanish-speaking patients appeared obviously psychotic during native-tongue interviews but seemed much less so, and even without any overt psychotic symptoms, when the interview was conducted in English. In this latter report, the interviews were part of pretrial examinations. The interviewer was free to conduct the interview in any manner he chose in order to accomplish this goal. Under these circumstances it is difficult to evaluate the extent to which the interview procedure apart from the interview language, contributed to the difference in detected pathology. Moreover, the issue of legal competence is a somewhat circumscribed one and may reflect only certain components of the psychiatric evaluation.

We have recently developed a method for obtaining standardized psychiatric mental status evaluations utilizing a combination of prerecorded interview questions and closed-circuit television. This procedure has been described in detail elsewhere (9, 10). In effect, it provides a reliable method for minimizing interview variability and for attaining a permanent record that may be rated under well-controlled conditions. The method has been shown to be at least as sensitive as the standard face-to-face procedure in the assessment of level of psychopathology and in the estimation of response to treatment. Utilizing this method we undertook a study of the effect of interview language on the rating of psychopathology. It was our expectation that by separating the rater from the interview situation we would be able to derive a clearer understanding of this effect.

METHOD

Ten recent admissions to the adult services of Bellevue Psychiatric Hospital were selected for this study. The criteria for admission to the study were as follows: 1) diagnosis of schizophrenia, made independently by two psychiatrists; 2) no evidence of organic brain disorder; 3) Spanish as the native language; 4) fluency in English sufficient to participate in English psychiatric interviews; and 5) willingness to volunteer for the study. Patients were not informed as to the aim of the study. In table 1

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This study was supported in part by Public Health Service grant MH-08618 from the National Institute of Mental Health.

The authors wish to express their appreciation to Paul Beatty, Florence Diamond, Victor Martin, Sanghae Park, and Nelly Pastoriza.

TABLE 1
Description of the Patient Sample

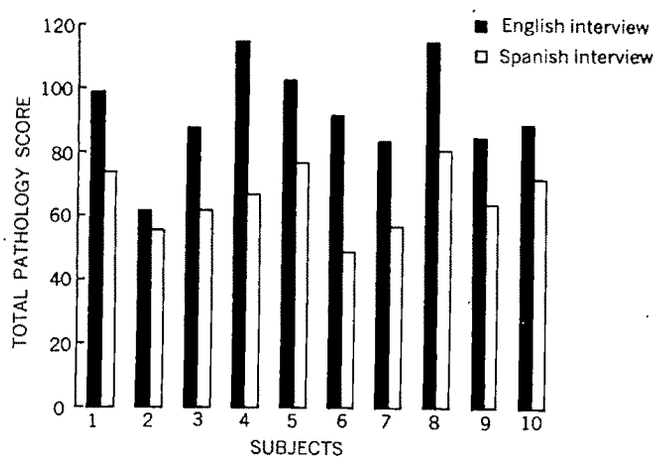
Subject	Sex	Age	Years of Education	Years in United States	Wechsler Vocabulary Score		Diagnosis	Drug Treatment
					English	Spanish		
1	M	21	9	3	10	20	Chronic undifferentiated schizophrenia	300 mg. chlorpromazine
2	F	34	9	24	27	38	Chronic undifferentiated schizophrenia	400 mg. chlorpromazine
3	M	32	10	20	36	38	Faranoid schizophrenia	200 mg. chlorpromazine
4	F	31	12	25	35	49	Paranoid schizophrenia	400 mg. chlorpromazine
5	M	34	11	17	23	42	Chronic undifferentiated schizophrenia	30 mg. trifluoperazine
6	M	31	9	10	56	68	Paranoid schizophrenia	20 mg. trifluoperazine
7	F	34	5	18	9	28	Chronic undifferentiated schizophrenia	300 mg. chlorpromazine
8	F	29	6	6	12	40	Chronic undifferentiated schizophrenia	400 mg. chlorpromazine
9	M	21	9	20	60	34	Paranoid schizophrenia	350 mg. chlorpromazine
10	M	42	7	39	50	18	Chronic undifferentiated schizophrenia	30 mg. trifluoperazine

the background and clinical characteristics of the patients are listed.

Four psychiatrists contributed independent ratings of the videotapes. Two had Spanish as their mother tongue and two were English-speaking. The four psychiatrists were experienced in the use of the Brief Psychiatric Rating Scale (BPRS) (11) and had previously participated in training sessions designed to establish acceptable levels of interrater reliability. Raters were blind as to the purpose of the study and to the admission criteria as well.

In order to study the interrater reliability between English- and Spanish-speaking raters, one of the English and one of the Spanish raters viewed ten additional videotape interviews of English-speaking schizophrenic patients. Interrater reliability for these ratings, based on the total pathology scores, was $r = .85$ ($t = 4.56$, $p < .01$). The means of the total pathology scores were 50 for the English-speaking rater and 49 for the Spanish-speaking rater. These mean scores were not statistically different ($t = 1.04$, $df = 9$, $p > .3$).

FIGURE 1
Total BPRS Pathology Scores for Each Subject in English and Spanish Interviews



Closed-circuit television recordings were made of standard psychiatric interviews in English and Spanish. Half of the patients participated in the English interview first and vice versa. The two interviews were spaced no more than 24 hours and no less than 20 hours apart. During this period no change was made in the patient's medication. An English-speaking or Spanish-speaking clinician was present during the interview; however, his participation was minimal since the interview questions had been put on audiotape. The English and Spanish questions, which were identical, were presented in the same order. The videotape recordings of the English-language interviews were independently rated by the two English-speaking psychiatrists; the interviews in Spanish were also rated independently by the two Spanish-speaking psychiatrists. Finally, both the English and the Spanish versions of the vocabulary subtest of the Wechsler Adult Intelligence Scale (12) were administered to the patients after the psychiatric interviews had been completed.

RESULTS

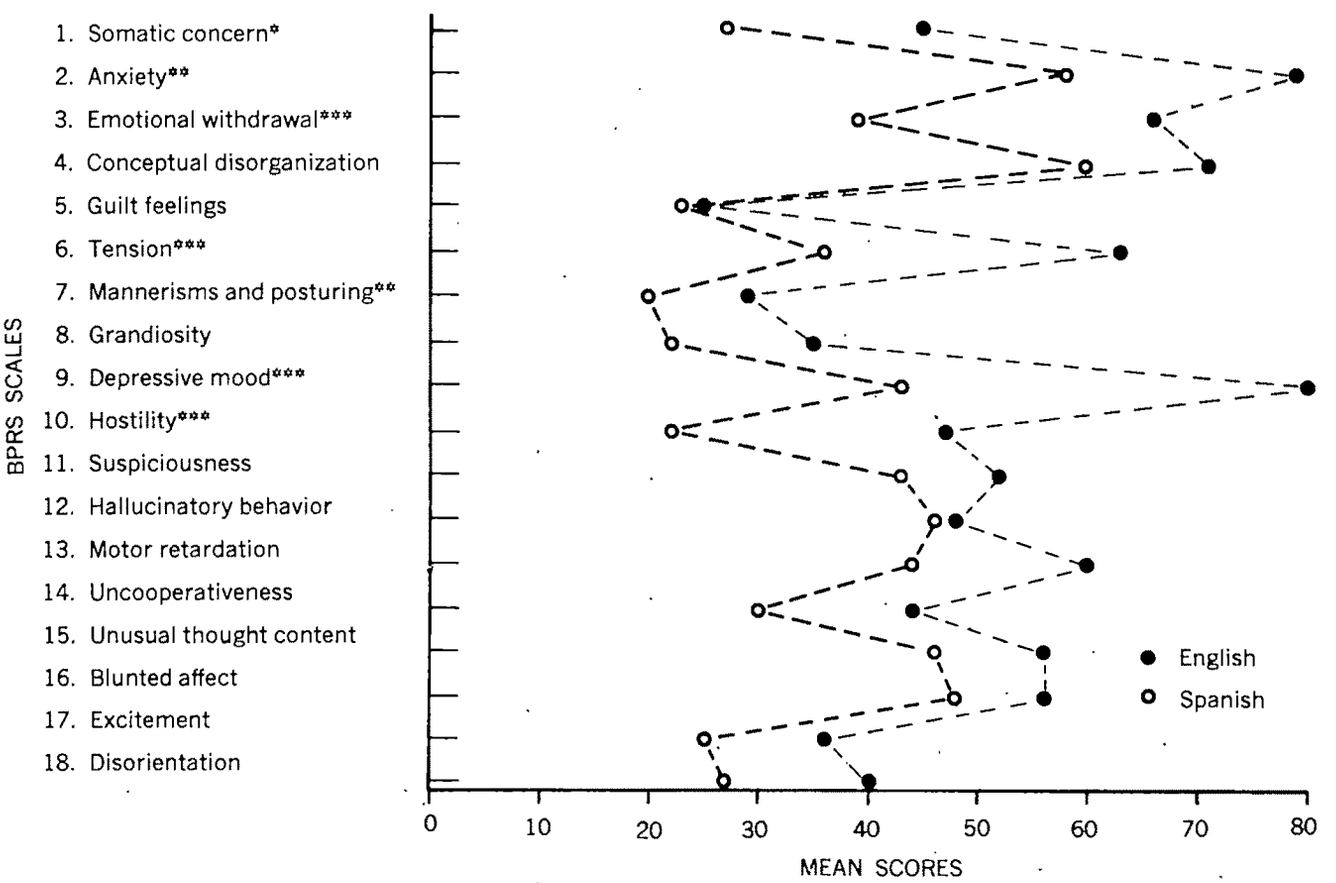
To determine whether the language of the interview would have an effect on the amount of pathology detected by the raters, we computed the total pathology score for each patient. This score, which is the sum of the ratings on the 18 BPRS scales for the two raters per language, is presented for each patient in figure 1. In this figure it can be seen that more pathology was detected during the English interview for each patient. The mean score for the English-language interviews was 93 and for the Spanish-language interviews 65; the difference was highly significant statistically ($t = 7.11$, $p < .001$). Interrater reliability for the Spanish-speaking raters was .91 ($t = 6.31$, $p < .001$). The difference between the mean levels of pathology detected by the two Spanish raters was not statistically significant. Interrater reliability for the English-speaking raters was also .91. The means of the total pathology scores were 48 for English-speaking rater

1 and 45 for English-speaking rater 2. The difference between these means, although small from a clinical point of view, was statistically significant ($t = 2.61$, $p < .05$). However, this difference between the English-speaking raters would not contribute to the difference between the English and Spanish ratings. It was English-speaking rater 1 who, together with Spanish-speaking rater 1, participated in the preliminary reliability study in which it was found that English-speaking rater 1 and Spanish-speaking rater 1 detected equivalent levels of pathology. Since English-speaking rater 2 tended to rate lower than English-speaking rater 1, this would if anything tend to decrease the levels of pathology detected on the combined English ratings.

From this analysis it is clear that our bilingual patients have been judged to demonstrate more pathology when they have been interviewed in English. To determine whether this increment in pathology in the English-language interviews reflected a simple constant added to the amount of pathology detected in the Spanish-language interviews, the product-moment correlation between the total pathology scores in English and Spanish was computed, and was found to equal .64. This correlation was significantly different from zero but was lower than the correlation we usually obtain when two of our experienced raters evaluate the identical behavioral sample. (The five-percent confidence limits for a correlation of .64 with an N of 10 are .36 and .81.) The lowering of interrater correlation across languages might be interpreted as suggesting that patients are differentially affected by the language of the interview.

We will now report the effect of the language of interview on the individual BPRS scales. In figure 2 the mean score for each scale is presented for both the English and Spanish interview. The mean scores are significantly elevated for seven of the 18 scales (t test between correlated means). The scales most affected by the language of the interview were "tension," "depressed mood," "hostility," "anxiety," "emotional withdrawal," and "somatic concern."

FIGURE 2
Pathology Score for Each BPRS Scale in English and Spanish Interviews



*p<.02.
**p<.05.
***p<.01.

The differences between the English and Spanish interviews for the rest of the scales were not statistically significant.

DISCUSSION

Our results indicate that Spanish-American patients are consistently rated as showing more pathology when they are interviewed in English. Even the two patients who obtained higher vocabulary scores in English than in Spanish were evaluated as presenting more pathology in their English-language interview. The vocabulary score is not a direct measure of language fluency, but this finding would suggest that caution should be taken in the psychiatric evaluation of patients whose first language is not English, including those who appear competent in it.

Our results disagree with those of Del Castillo (8), who conducted interviews in both Spanish and English and felt that he uncovered more pathology in Spanish interviews with Spanish-American patients. A factor that might have contributed to the discrepancy could be related to the different effects of pathology in the two studies. In Del Castillo's setting it was to the advantage of the patients to demonstrate enough pathology to avoid trial. Our patients frequently want to minimize their symptoms in order to elude long-term hospitalization. Patients who are more competent in Spanish may be better able to communicate the level of pathology that will produce the most desirable disposition for them. However, it is unlikely that the amount of pathology detected in a psychiatric examination is simply a function of the impression the patient wishes to make.

There are three general factors that should be considered here—one related to the raters, one related to the patients, and one residing in the interaction between the raters and the patients. First, we might hypothesize that patients are actually the same in the English and the Spanish interviews. The average patient received a total pathology score of 46.5 for his English interview and 32.5 for his Spanish interview. The higher pathology scores given by the English-speaking raters or the lower scores given by the Spanish-speaking raters could reflect rater prejudice. Brody (13) has mentioned the possibility of positive as well as negative prejudice; he has attributed the roots of prejudice to intrapsychic factors within the prejudiced individual.

Whether the ratings of the English or the Spanish interview are taken as reflecting the "true" pathology, the 14-point difference between the ratings can be seen as representing the mean of a distribution of prejudice points and could be viewed as separable from the distribution of pathology points. If this were so it would be difficult to explain the high interrater correlation between the two English-speaking and the two Spanish-speaking raters (for both, $r = .91$), since if prejudice points were attributes they might be expected to be distributed more randomly across the patients and would thus dilute the correlation. Of course, pairs of raters might share identical stereotypes; we cannot eliminate such a possibility with these data.

To further check on the prejudice hypothesis, a multiple correlation was computed between the English Pathology Score, the Spanish Pathology Score, and the Spanish Vocabulary Score. The reason for looking at these independent predictors was that they were patient variables unavailable to the English-language rater. The multiple correlation was .83, and each of the predictors independently added significantly to the correlation analysis of variance (ANOVA). It is hard to imagine any simple prejudice mechanism through which these orderly relations could operate from predictors not accessible to the rater.

Although we can account for a significant part of the difference between the English and Spanish ratings in terms of patient variables, we cannot exclude the possibility that both positive and negative rater prejudices contributed to the different levels of pathology found.

The second factor that might operate to produce the increment in English interview pathology is related to the hypothesis that the patient changes when he is required to speak English. Under the best of circumstances, schizophrenics find it difficult to describe their experiences. They may be tense when speaking in English (scale 6). They may just "give up" in their attempt to communicate and appear more emotionally withdrawn (scale 3) and uncooperative (scale 14). We have some evidence that this factor was operative; we will report differences between the patient's responses to identical questions in Spanish and English in a separate report (14).

The third factor derives from the fact that the raters' frame of reference is not applicable to the special problems of the Spanish-American patient. For example, in a previous study we showed that when an English-speaking patient becomes depressed, a number of things change in the way he speaks; these include an increased duration of articulations and markedly increased pause times (15). Some of these changes may also be found when an individual speaks in a language in which he is less competent, so that the rater might confuse the effects of translation with the effects of depression (scale 9). Similarly, Mahl (16) has demonstrated that speech disturbances are verbal indicators of anxiety. We have found more of the speech disturbances that Mahl has described in our patients while they speak English and thus would expect elevation in the anxiety ratings (scale 2).

In addition, under this factor the problems of norms for cross-cultural ratings might be subsumed. For example, Fernandez-Marina (17) has described the "Puerto Rican syndrome," emphasizing the conversion reaction component. Fabrega and associates (18) and Wolf (19) have noted an increased frequency of somatic complaints in Mexican-American and Puerto Rican patients. Thus one might expect an elevation on scale 1 ("somatic concern"). Spanish-speaking raters appear to have a more culturally relative attitude and seem better able to evaluate these patients' statements within the context of their Spanish-American cultural background.

CONCLUSIONS

In a study of ten schizophrenic patients whose mother tongue was Spanish we found that psychiatric ratings reflected greater psychopathology when the patients were interviewed in English than when they were interviewed in Spanish. Although a contribution from rater prejudice (both positive and negative) could not be excluded, there was evidence suggesting clinically relevant changes in the patient attributable to the problems of speaking in a second language. There were also indications that the clinician's frame of reference, which is applicable to native English-speaking patients, cannot be directly applied to the evaluation of patient behaviors that are influenced not only by psychopathology but by cross-cultural, cross-language factors as well.

Because of the limited number of trained professionals who are competent in Spanish, we expect the practice of interviewing patients in their less competent language to continue. We are currently in the process of analyzing the verbal and nonverbal communication differences from our closed-circuit television recordings to ascertain the nature of the differences. We are also trying to determine whether we can provide the English rater with a yardstick to minimize some of the constant errors resulting from the interview language.

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Answers to Questions of the Month

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A Unified System of Care: Blueprint for the Future

BY ALLAN BEIGEL, M.D., WILLIS H. BOWER, M.D., AND ALAN J. LEVENSON, M.D.

The authors describe the means used in Pima County, Arizona, to unify and coordinate the policies and procedures of a state hospital system and a community mental health system in order to provide more effective delivery of mental health services at the community level. The cooperation of the state hospital also permitted the development of a deterrent to unnecessary state hospitalization and a reduction in the number of patients to a level at which more specific therapeutic programs could be developed to meet the needs of the patients who remained.

SINCE THE INCEPTION of the community mental health center program in 1963, many states have been supporting two systems of mental health service delivery—a state hospital system that has been in existence for many years and a recently developed community mental health center system. Even though the large majority of states have unified these two systems administratively into a single state department of mental health, the actual delivery of services continues to be competitive rather than cooperative.

The new system, the community mental health center, is often viewed as a threat by the old system, the state hospital. Proponents of the new system, on the other hand, often see the old system as obsolete and unnecessary. Whatever the merits of the arguments between proponents of each system, it is clear that a conflict between mental health systems can be easily created, and this often has a negative effect upon funding sources. For example, if legislators see mental health professionals as being unable to agree, they may provide less funding, thereby decreasing the effectiveness of both systems of care.

At the same time, federal, state, and local funding resources are placing increasing emphasis on data that will demonstrate the social benefit, cost effectiveness, and efficiency of new services. Numerous allegations have been made concerning the cost effectiveness of new therapeutic modalities that are a part of community mental health center services, such as walk-in clinics and day programs, but demonstrations of their actual impact on cost effectiveness have been infrequent.

Recently, in New York City, it has been required that the progress of mental patients must be demonstrated by facilities in order to assure continued public support of services. In announcing the mailing of a "change in client condition report," Dr. Herbert Fill, Commissioner of the New York City Department of Mental Health and Retardation Services, observed, "We consider such data of extreme significance when related to social benefit, costs, and the ability to show tangible outcome of city, state, and federal funding sources" (1).

If mental health is to continue to enjoy its relatively favorable position of recent years, not only will such data have to be provided, but conflict will also have to decrease between these separate systems of care and communities and states will have to move toward a single system of mental health delivery. State hospital systems and community mental health systems will have to be encouraged to develop program ties that can be analyzed as to their cost effectiveness (2, 3).

This paper will describe a relationship between community mental health services in Pima County (Tucson), Arizona, and state hospital services located in Maricopa County (Phoenix). Through this program, a unified and coordinated direction, policy, and procedure have been given to the delivery of mental health services within Pima County, resulting in the more effective delivery of increased services at the community level. The model and mechanisms used to effect these ties can serve as a blueprint for the future for other communities and states that are currently experiencing this continued competition between two systems of care.

A BRIEF HISTORY

Prior to September 1970 in Pima County, Arizona, there were three noncoordinated methods of providing mental health care to those who could not purchase private treatment. The Pima County Hospital, operated by the county health department, was charged by law with the immediate care and detention of individuals who possibly required mental health care. Admission to the Pima County Hospital was by a petition for commitment only, and treatment rarely extended beyond the use of drugs. Psychiatric evaluations were completed and a court hearing was held that resulted in the commitment of the patient to the Arizona State Hospital for further treatment or a discharge without coordinated follow-up.

The Arizona State Hospital in Phoenix received com-

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mitted patients from Pima County. Although a unit system, based upon geographic relationships, had been organized in 1967, continuity of care and the coordination of services with those located in Pima County were minimal.

The Southern Arizona Mental Health Center in Tucson, an outpatient branch of the Arizona State Hospital, was established in 1962. Created initially to function as a follow-up clinic for patients discharged from the Arizona State Hospital, it broadened its approach over the years by developing more programs that reached out to the community. Nevertheless, because the Southern Arizona Mental Health Center did not have an inpatient facility and because the responsibility for commitment belonged to the Pima County Hospital, the center was totally unable to make an impact on the rates of hospitalization and rehospitalization at the Arizona State Hospital.

In late 1968, a task force was formed by the Pima County Health Department, including representatives from the center, the state hospital, and the department of psychiatry at the newly formed University of Arizona College of Medicine. From these discussions, which lasted 18 months, a tightly organized agreement was signed that resulted in the pooling of resources and the placing of services within a unified service network. This Combined Mental Health Care Program was designed to provide community-based crisis intervention and brief hospitalization, with the express purpose of decreasing the need for hospitalization at the Arizona State Hospital and of maximizing the cost effectiveness of the mental health dollars being spent.

It is now headed by a coordinator, who also functions as chief of psychiatry at the Pima County Hospital and as director of the Southern Arizona Mental Health Center. A conference committee, consisting of representatives from the Pima County Health Department, the Arizona State Hospital, and the University of Arizona, acts as an advisory and policy-making body. A citizens advisory board also provides guidance.

EFFECTS ON SERVICE DELIVERY

The Combined Mental Health Care Program was initiated on September 1, 1970. Data have been gathered over a 16-month period, ending December 31, 1971, and have been compared with the 12-month period prior to the initiation of the program.

As can be seen from figure 1, the Combined Mental Health Care Program has had a dramatic effect on the rate of admissions to the Arizona State Hospital from Pima County. From an average of 33.6 admissions per month during the 12 months prior to the initiation of the Program, a decrease to 13.2 has been noted during the next 16 months. Furthermore, the rate of civil commitments to the Arizona State Hospital from Pima County has also markedly decreased, from 75 percent of all admissions to the Arizona State Hospital from Pima County (September 1969–August 1970) to only 39 percent since the program began.

The initiation of the Combined Mental Health Care Program has also had an effect on the Pima County census at the Arizona State Hospital (figure 1). The sharp decrease in admissions to the Arizona State Hospital from Pima County has led to a decrease in the number of residents of Pima County at the Arizona State Hospital. Furthermore, because of this continuing decrease in the census of Pima County patients at the Arizona State Hospital, the hospital has been able to develop more specialized programs, such as for chronic institutionalized patients, that will better meet the needs of those who remain at the Arizona State Hospital.

These achievements are a direct result of the coordination of services between the Southern Arizona Mental Health Center and the Pima County Hospital. The availability of a walk-in clinic at both the Southern Arizona Mental Health Center and the Pima County Hospital, offering immediately available and accessible crisis intervention services 24 hours a day, seven days a week, on a face-to-face basis with a mental health professional, has helped to decrease the number of admissions to the Pima County Hospital (figure 2).

Furthermore, prior to the initiation of the program, all patients admitted to the Pima County Hospital Neuropsychiatric Unit entered on a court-issued detention order. Involuntary hospitalization introduced legal procedures into the hospital setting that often deterred the staff from the initiation of active treatment. With the change in orientation of the inpatient services to voluntary, short-term crisis intervention, 75 percent of all patients now enter voluntarily.

FIGURE 1
Pima County Residents at Arizona State Hospital: Number and Rate of Admissions (September 1969–December 1971)

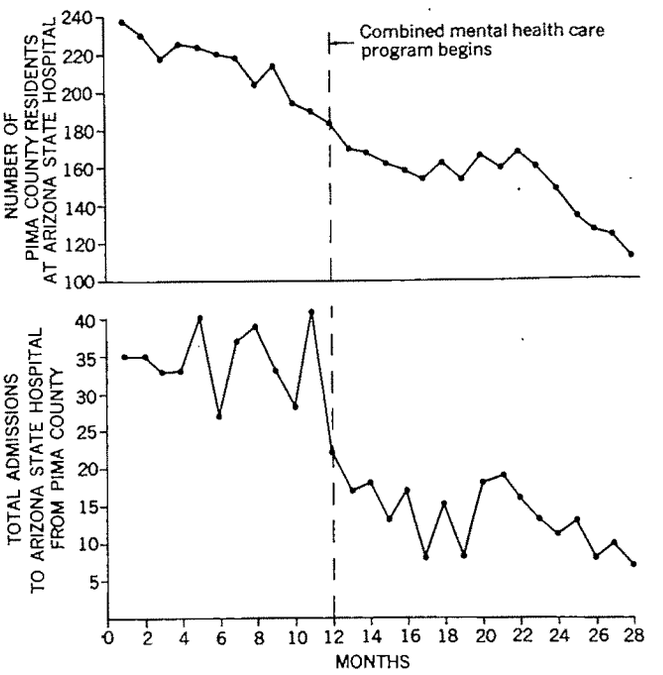
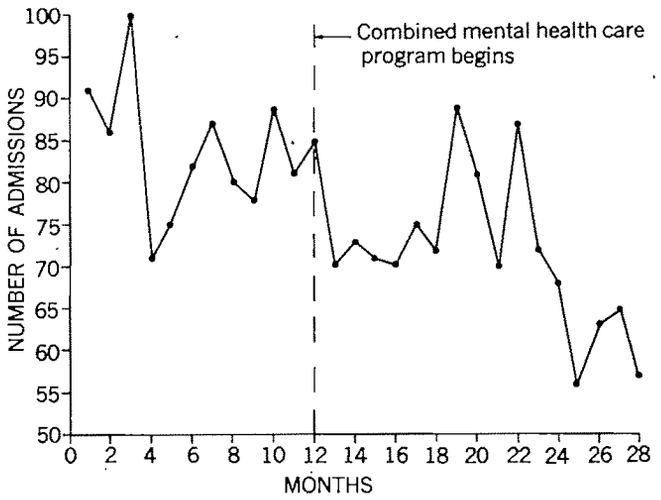


FIGURE 2
Psychiatric Admissions to Pima County Hospital (September 1969–December 1971)



Another result of the decrease in admissions to the Pima County Hospital due to the crisis intervention efforts of the walk-in clinic has been a decline in the average daily census of the inpatient unit from 16.8 (on a 20-bed unit) prior to the initiation of the program to an average of 13.0 during the last four months of 1971. This decrease in average daily census, however, has not been accompanied by a decrease in the average length of stay (6.8 days). Consequently, with fewer patients being admitted, the staff of the inpatient unit is able to provide more intensive treatment services than was possible prior to the initiation of the Combined Mental Health Care Program.

Within the framework of the Combined Mental Health Care Program, another relationship between the Pima County Hospital and the Southern Arizona Mental Health Center has been developed. Patients who enter the Pima County Hospital voluntarily can be transported each day from the Pima County Hospital to the Southern Arizona Mental Health Center day program for milieu treatment if it is indicated. These patients often continue in the day program following their discharge from the hospital. The availability of this relationship has enabled the staff at the Pima County Hospital, with its limited facilities, to expand the number of treatment modalities that are available to patients who are admitted.

Another outgrowth of the Combined Mental Health Care Program has been its effect on geriatric patients. Previously, many of them were sent to the Arizona State Hospital on a commitment basis when available nursing home facilities within the community would not accept them for care. Through the Combined Mental Health Care Program, psychiatric consultation has been made available to the county nursing home. Consequently, it has been more willing to accept geriatric patients who were being inappropriately sent to the Arizona State Hospital. During the past six months, all geriatric patients who have been evaluated as suitable for nursing home care rather than state hospital care have been transferred back to Pima County from Arizona State Hospital and into appropriate nursing home programs. Over 60 percent of all geriatric patients at the Arizona State Hospital from Pima County were found suitable for such transfers.

THE "FAIR SHARE" PLAN

In creating the Southern Arizona Mental Health Center in 1962, the Arizona State Hospital had hoped to justify the additional expenditure for staff and personnel in Tucson by decreasing the rate of hospitalization from Pima County. This decrease had not occurred. The creation of the Combined Mental Health Care Program was also intended to produce fiscal results that would justify the continued existence and expansion of the Southern Arizona Mental Health Center.

Therefore, a method for performing a cost analysis was worked out based on a "fair share" of the Arizona State Hospital budget for Pima County, computed on the basis of population, with Pima County being entitled to 20.3 percent since this is the percentage of people in the state residing within Pima County.

Tables 1–3 illustrate the impact of the Combined Mental Health Care Program on the expenditures for the care of patients from Pima County at the Southern Arizona Mental Health Center and the Arizona State Hospital. Prior to the initiation of the Combined Mental Health Care Program, as noted in table 1, the program for Pima County residents at the Southern Arizona Mental Health Center and the Arizona State Hospital were operating at

TABLE 1
Cost Analysis and "Fair Share" Calculation for Pima County Residents: June 1970

Treatment Modality	Daily Charge per Patient (June 1970)	Pima County Census at Arizona State Hospital (ASH)	Total Daily Cost
Adult psychiatry	$15.46	132	$2,043.72
Physically infirm	26.41	5	132.05
Geriatrics	16.75	26	435.50
Mental retardation	15.76	36	567.36
Child psychiatry	30.61	6	183.66
Maximum security	18.92	10	189.20
Total		215	$3,551.49
			x 365
Annual cost of Pima County residents at ASH			$1,296,294
Southern Arizona Mental Health Center budget			+ 551,000
Total expenditures for Pima County			$1,847,294
Pima County "fair share" of total ASH 1969–70 budget*			– 1,406,342
"Deficit" from "fair share"			$ 440,952

*20.3 percent of $6,927,795.

TABLE 2
Cost Analysis and "Fair Share" Calculation for Pima County Residents: March 1971

Treatment Modality	Daily Charge per Patient (March 1971)	Pima County Census at Arizona State Hospital (ASH)	Total Daily Cost
Adult psychiatry	$16.54	75	$1,240.50
Physically infirm	31.40	6	188.40
Geriatrics	18.74	20	374.80
Mental retardation	17.49	30	524.70
Child psychiatry	38.40	6	230.40
Maximum security	27.50	12	330.00
Early discharge	30.59	1	30.59
"Flamenco II" program	16.54	10	165.40
Total		160	$3,084.79
			x 365
Annual cost of Pima County residents at ASH			$1,125,948
Southern Arizona Mental Health Center budget			+ 637,582
Total expenditures for Pima County			$1,763,530
Pima County "fair share" of total ASH 1970–71 budget*			- 1,737,802
"Deficit" from "fair share"			$ 25,728

*20.3 percent of $8,560,605.

an "annual deficit" from the "fair share" of $440,952. In other words, the combined cost of caring for patients from Pima County at the Arizona State Hospital and the Southern Arizona Mental Health Center was $440,952 more than the amount allotted for Pima County ($1,406,342) as determined through a computation of the "fair share" of the total Arizona State Hospital budget.

By March 1971, six months after the initiation of the Combined Mental Health Care Program, this "deficit" had been reduced to $25,728 (table 2). By December 1971, 16 months after the initiation of the Combined Mental Health Care Program, a "surplus" of $108,534 (table 3) had been generated. It has been jointly agreed that any surplus in the "fair share" will be translated into additional positions for the Southern Arizona Mental Health Center, to be utilized to deliver locally based community services. Conversely, any deficit will be taken out of the budget of the Southern Arizona Mental Health Center, to be used for the care of patients from Pima County at the Arizona State Hospital.

The surplus that has been accumulated to date has enabled the Southern Arizona Mental Health Center to expand its community-based programs. The Southern Arizona Mental Health Center and the Arizona State Hospital were able to approach the legislature with the fiscal and service data necessary to substantiate a request for a halfway house program in Pima County. As a result of the presentation made, the legislature appropriated $178,000 to purchase land and buildings. The funds for the additional staff needed to operate the halfway houses will be taken from the surplus that has been accumulated to date as a result of the impact of the combined Mental Health Care Program.

DISCUSSION

Planning for the development of a unified system of mental health service delivery is a difficult task. The success of the Combined Mental Health Care Program in creating this unified system for the residents of Pima County can be partially attributed to the origins of the impetus for the creation of the program. Unlike the experiences in California, where the impetus for the development of a more unified system of care began at the state legislative level and came to the local communities through the Lanterman-Petris-Short Act, within Pima County its origins were in the community and were then directed toward the state level.

The early involvement of many citizens, who had concerns about the quality of mental health services available in the community and the misuse of the state hospital as a "dumping ground," was responsible for the grass-roots movement that eventually resulted in the creation of the Combined Mental Health Care Program. It is extremely doubtful whether this program could have been developed if the impetus for it had come solely from the state hospital or from the legislative level.

On the other hand, community interest and concern must be given support by the creation of appropriate incentives that will make the creation of a unified system of care worthwhile for the community. Professionals who are involved with different agencies and who have their own vested interests regarding the delivery of services can only be drawn together into an acceptance of the theoretical goals and practical consequences of a unified system of care if they are accompanied by the financial incentives that the Combined Mental Health Care

TABLE 3
Cost Analysis and "Fair Share" Calculation for Pima County Residents: December 1971

Treatment Modality	Daily Charge per Patient (Dec. 1971)	Pima County Census at Arizona State Hospital (ASH)	Total Daily Cost
Adult psychiatry	$24.80	35	$ 868.00
Physically infirm	39.11	4	156.44
Geriatrics	22.11	16	353.76
Mental retardation	21.93	31	679.83
Child psychiatry	51.84	3	155.52
Maximum security	29.71	13	386.23
Social learning	37.50	3	112.50
"Kachina II" program	24.80	7	173.60
Total		124	$2,885.88
			x 365
Annual cost of Pima County residents at ASH			$1,053,346
Southern Arizona Mental Health Center budget			+ 763,970
Total expenditures for Pima County			$1,817,316
Pima County "fair share" of total ASH 1971–72 budget*			- 1,925,850
"Surplus" over "fair share"			$ 108,534

*20.3 percent of $9,486,946.

Program included through its relationship with the state.

In addition, incentives must also be present for the state hospital system if it is expected to cooperate in the creation of a unified system of care. In the case of the Combined Mental Health Care Program, these incentives were not overtly financial, but primarily programmatic. Prior to the institution of the Combined Mental Health Care Program, the state hospital was forced into a custodial role for many of its patients because of the large number who flowed into it not only from Pima County, but also from other communities in Arizona. Coupled with both an absolute and relative shortage of staff, it became extremely difficult for the state hospital to develop specific programs that met the needs of its patients.

The cooperation of the state hospital in the creation of a Combined Mental Health Care Program resulted not only in the implementation of an effective community program that provided locally based mental health services but also in the development of a deterrent to unnecessary state hospitalization, which helped bring the census of the state hospital within the therapeutic capability of the available staff. When this happened, the state hospital was able to develop specific therapeutic programs that met the needs of the specific patient groups that remained within the hospital, such as the chronically ill, the institutionalized, and the geriatric patient (4). Consequently, the cooperation of the state hospital in a unified system of care can enable it to shake off its previous image of a custodian to the mentally ill and to move toward acquiring a new image as a dynamic leader in the creation of therapeutically sound programs for the chronically ill.

Finally, the creation of a unified system of care, as exemplified by the Combined Mental Health Care Program, was also greatly aided by the availability of a "neutral" third party, which was able to mediate concerns and differences between the community and the state hospital and act as a catalyst for the development of this new system. In the case of the Combined Mental Health Care Program, the local medical school served in this capacity. However, in other communities, where a medical school may not be available, other types of agencies may serve comparable purposes. For example, a local health planning agency that has a mandate to coordinate mental health services within the community could also serve as the bridge between the community and the state hospital. Mental health associations, if they have a firm base and are accepted within the community, may also be an additional resource as a catalyzing agency in the development of the necessary relationships between the local community program and the state hospital program.

CONCLUSIONS

The development of community psychiatry and community mental health programs has often been called the "third revolution" in psychiatry. However, if this "third revolution" is to gain an adequate base and eventually establish itself as an accepted part of the total treatment spectrum, a "fourth revolution" will have to take place—one that will bring the community mental health center model into a unified system with the previously existing state hospital model.

The time is certainly not too soon for both local communities and state hospital programs to put away the competitive attitudes that have characterized their relationship since the development of the community mental health center program and to begin to move more effectively toward the creation of a truly unified system of care.

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The Teaching of Psychiatry to Medical Students

BY JOHN ROMANO, M.D.

The author describes some of the changes that have taken place in undergraduate medical education in the past ten years and indicates some of the areas that will probably be touched by further change. Since these changes increase the need to develop a valid and reliable method of assessing the clinical performance of medical students, the author reviews some of the studies of this type that have been reported and the methods and instruments that they have used.

DURING THE PAST 25 years, at APA's annual meetings and in the published reports that emerge from these and similar meetings, attention has been drawn to the changes that have occurred in the teaching of psychiatry to undergraduate medical students in our nation. These comments include comparative observations of the teaching of medical students in the United Kingdom, Ireland, other Western European nations, the Soviet Union, and the Middle East (1–12).

More recently, in an autobiographic sense, I compared my initial experience in the field of psychiatry as a medical student 40 years ago with those afforded students of today (13). While there may have been exceptions, I believe that my experience as a student was quite representative of the form and content of the teaching of psychiatry to medical students in the early 1930s. Full-time faculties, particularly in the clinical disciplines, were rare indeed, and provisions for the serious engagement of medical students in the study and care of the mentally ill were even rarer.

What changes have taken place in the interim? Because of the establishment of psychiatric services in general teaching hospitals, and because federal funds made it possible to appoint increasing numbers of persons to full- and part-time clinical faculties, today's student is able to study and care for the mentally ill patient in the teaching hospital—that is, in the same setting in which he studies and cares for medical, surgical, and obstetrical patients.

It is in the traditional setting of the university teaching hospital that the medical student learns at first hand the nature of mental illness. It is here that he learns of the shame, guilt, anxiety, and at times the perplexity and despair of his patient, and it is here that he learns, too, of the effect mental illness may have on other members of the patient's family and other social groups. He has the opportunity to learn something of how aberrant mental behavior has been regarded in the past and in the present day. He gains firsthand experience in managing and treating patients who are delirious and demented, depressed, and hypochondriacal, and he senses something of the great enigma that is schizophrenia. He becomes aware of the universality of suicidal ideas, of the significance of suicide attempts, and of the fact that suicide is a major cause of death.

The student's experience in the university teaching hospital makes possible assignments to various clinical divisions of the teaching hospital; thus he is able to learn something of the uses and abuses of diagnostic and therapeutic procedures and of emergency, short-term, and long-term hospital care. He is also in a position to learn to be critically perceptive about these methods and can begin to measure the effectiveness of physical agents, drug treatment, and individual and group psychotherapy. In this work he also has an excellent opportunity to learn that man is a social animal, that his patient is a member of a group and of a family, and that the patient's distress and symptoms can be understood more clearly if they are dealt with in these social terms. Similarly, the student learns that he, too, is a member of a group in the hospital and the clinic. In this way he learns more specifically about his role, the tasks assigned to him, and those assigned to his associates.

Many students will have additional opportunities to work with chronically disabled persons, including the handicapped, the retarded, the chronic psychotic, the epileptic, and those with sensory defects. In this regard they will learn something of the psychology of illness and disability and of the coping capacities of patients with dis-

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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abilities. Furthermore, it is in the teaching hospital that the student will face many patients who present diagnostic dilemmas, including those with intractable pain in whom evidence of structural impairment is minimal, patients with nonspecific symptoms of fatigue and restlessness and depression, and patients who are dying. He will also learn about the events, including bereavement, that affect those who care for the dying patient.

The unique contribution that psychiatry can make to the education of the medical student is to help him understand the differences between objective observation, participant observation, subjective observation, and self-observation. Skills in objective observation have been his principal heritage from his background in science, but as he learns other types of observation, he finds that this differentiation of his role function is necessary for him to understand his relationship to his patient and to his growing capacity for human intimacy in the specific task of becoming a physician.

Perhaps for the first time the student confronts the fact that there is no satisfactory unitary concept of human biology and that, in spite of the valiant attempts of general systems theorists, there has emerged no satisfactory language that does full justice to the biological, psychological, and social aspects of the human condition. This is best illustrated in attempts to explain the nature of the schizophrenic person and his family. Although much has been learned, the condition still remains enigmatic.

Most of us would agree that etiological considerations can be divided into three paradigms of patterns. The first is to the effect that schizophrenia is an organic disease and that there are genetic factors, metabolic and biochemical factors, and neurophysiological and neuropathological factors, or several combinations of these. A second notion is that schizophrenia is a purely psychogenic condition similar to what many believe underlies psychoneurosis. In this paradigm individual psychodynamic factors, family relationships, and social and cultural factors are included. A third is a general combination of the biogenetic and the psychogenic points of view, essentially indicating a diathesis plus stressor hypothesis.

Obviously, one of the central objectives of this learning experience is to assist the student to become critically perceptive of data and to acquire some notion of the emergence of ideas and practices in the field of his concern. More than in other fields, he must carry the anxiety that accompanies the uncertainty of his knowledge. In examining the general notion of personality he will learn of genic and ontogenetic factors in the growth, development, and decline of the person. From developmental physiology and psychology he will learn something of the various stages of the life cycle and of the role of the nervous system in this evolution. He will recognize that there are unconscious and preconscious factors, in addition to conscious factors, that determine human behavior. He will learn that the personality is integral and indivisible and that, to understand man in human terms, he must become informed of the interaction between man and his social environment. I believe that much of this helps the student to obtain a clearer concept of health as well as disease. It also helps him to understand that psychopathology is multiply determined.

CHANGE IN THE CURRICULUM

What is to happen now, and what of the future? With Heraclitus, I believe that change is inevitable. I have also learned that change may be for the better, for the worse, or, as the French told us years ago, it may lead to the same. Obviously, there will be continuous changes in curricular patterns since the curriculum is an instrument, a means to an end, not an end in itself. Just as a broad liberal education has as its end the preparation of the ideal citizen, so too the medical curriculum, at any one time, has as its objective the preparation of the ideal physician—one who is informed and sensitive and equipped to deal with the health issues of his day. Education in general, as well as professional and technical education, is the concern of many thoughtful citizens. There is considerable criticism of the medical profession from within its ranks and, more particularly, from the public and the consumer-patient. This has led those responsible for medical education to become involved more systematically in studies of health delivery systems. Much of the ferment in medical education today stems from the very great contributions made by new information and technology in physics and chemistry as they apply to biology and to medicine.

The concerns about health delivery systems and what to do with the prodigious increase of new information obviously affects the curricular pattern of the undergraduate medical program, and during the past ten years certain trends have become more apparent. These include reducing the total period of professional education from four to three years in the undergraduate assignment, with resultant reductions in the time of basic core assignments and with increases in elective assignments and the number of interdisciplinary courses. Students have been invited to make early commitments in terms of their special interests, particularly through the establishment of multiple tracks in the curriculum. There are at the moment about 25 schools that have established three-year undergraduate curricular periods. Coincident with this has been the truncating of the professional graduate educational period. The free-standing internship has been eliminated and there are attempts to combine undergraduate and graduate programs into a single system.

I shall not discuss any of these matters in detail, since I have done so on a number of occasions previously, except to raise again the question of what can be done to maintain present standards of quality in medical education (11–13). In my view, one of the major contributions that psychiatry has made to the education of the modern physician has been to inform him of certain fundamental aspects of the human and social aspects of biology. Psychiatry has been the principal agent that informed the student of the basic emotional and cognitive aspects of human interaction. From his study and work with

patients, the student learns of the significance of the effects of psychosocial events as these occur in the lives of his patients and their families. I believe that there are considerable risks in requiring early commitment of a student to selective, and at times restrictive, fields of interest, which may reduce his options early in his intellectual and professional life.

I believe the student should have the freedom to choose his career, but I would hope that his choice would be intelligent and informed and would emerge from the wide range of opportunities that medicine provides. I am concerned, too, that present trends seem to degrade those experiences in which the student acquires skill in clinical reasoning. No one would challenge the fact that the basic qualities of dependability, responsibility, and accountability—the hallmark of the physician through the centuries—are acquired from his daily work in the study and care of his patients and from his teachers, who have taught him by example as well as by precept. As must be evident, I am concerned about the increasing technology of medicine. With the proposed reduction of time for professional preparation, including the elimination of the free-standing internship, will the professional person of tomorrow be less well prepared as a generalist? Will he be less broadly civilized to meet the problems of his day?

As I mentioned earlier, I am certain that change is inevitable and necessary in order that we may adapt to, and master, the health issues of the day and of tomorrow. But, in short, today's students have different experiences than most of us had 40 years ago. The changes provide substantial contributions to the education of the physician, and psychiatry has played a significant part in their achievement. In turn, the psychiatrist has had the benefit of a broad liberal education in medicine. While it is true that each generation is apt to exaggerate its importance and to overestimate its contribution to the common good, there is the wish, a very genuine wish, that whatever changes are to take place will enhance and develop further, not diminish, the educational opportunities of today's students. With the changes contemplated, there appears to be an even greater need to develop a reliable and valid method of testing the performance of our students in what can be called their clinical operations. With fragmentation of the curriculum, with interdisciplinary courses, with greater election, and with some disregard of the clinical disciplines, there is an even greater need to determine what is essential and fundamental in the education of the physician-to-be and what measures the school can take to assess these essential and fundamental qualities before certifying him as a Doctor of Medicine.

ASSESSING CLINICAL PERFORMANCE

The clinical performance of our students has been the concern of many of us. During the past 30 years we have observed medical students, interns, and house officers from many schools in this country and from many schools abroad and have compared their clinical skills. We also have accumulated a considerable number of self-report statements of graduates of our schools, comparing themselves with students from other schools as they meet each other in clinics and hospitals throughout the nation and the world. While this information is unsystematized and not very readily transmissible, it shows clearly that as yet there is no adequate substitute for consistent supervised instruction of the clinical student who is significantly and seriously engaged with, and responsible for, the care of his patient and the patient's family.

The limitations of the written tests are well known, although the introduction of psychiatry, in 1962, as a major independent subject in the National Board Examination, Part II, now enables the faculty of one's own school to compare the results of its students' performances with those from other schools, which remain anonymous, and also to obtain more detailed analysis of the examination responses in order to learn the strengths and weaknesses of one's students in the various subsections of the test. About 15 years ago we constructed a method for evaluating the clinical performance of our medical students, and in 1962 Salzman and I reported on our experiences (14).

The rating scale, as it finally emerged, consisted of nine categories and the student was rated in each category on a nine-point scale, ranging from "failed" to "outstanding." The nine categories included responsibility, knowledge of medical facts and the physical examination, knowledge of psychopathology and psychodynamics, psychological perceptiveness, relationship with patients, relationship with relatives, relationship with staff, the quality of the write-up, and growth of the student's performance. The scale adopted was better able to obtain normal distribution of grades than were earlier, more subjective methods. Grading was done multiply by members of the house staff and the senior faculty, who worked intimately with each student.

There still remains the question of rater reliability. It was the studies of Geertsma and Stoller in 1958 and 1960 (15) that set the stage for various later tests of assessing clinical psychiatric skills. The assessment procedure utilized filmed psychiatric interviews, objective evaluational ratings, and objectively derived criteria. They reported that highly significant differences were found between residents and freshmen, residents and volunteers, seniors and freshmen, and seniors and volunteers. Salzman and Goldstein, in our department at Rochester, reported on changes in clinical judgment as a function of psychiatric education (16, 17). They used a single tape-recorded psychiatric interview with a patient, which was played to a number of groups of students, residents, and faculty, who were then asked to rate the patient in terms of a large group of psychiatrically relevant statements. They also found a positive increment with greater psychiatric education and experience. Langsley (18) and Monroe (19) also used filmed interviews in attempts to approximate a measure of clinical skills and to go beyond measurement of only factual knowledge.

Thurnblad and his associates (20) have cautioned psychiatric educators about the use of simulated examinations as measures of proficiency in the acquisition of

clinical skills and believe that some measurement of student performance by direct observation is essential.

As I mentioned earlier, I am convinced that change is inevitable. I also believe that, if change is to take place, attention must be paid to the reasons for the change and the consequences of the change. The medical curriculum will always be in a state of flux, depending upon the amount of information, technical knowledge, and money available to it. Several of us have contributed to a more intimate, harmonious, and effective exchange between medicine and psychiatry in this second third of our century. I, for one, would hope that this will not be diminished. In the broad sense, I hope that we will continue to recognize and respect the individual differences between our students and to provide each of them ample opportunity to become all that he is capable of becoming. In practical terms, this means that the student should have sufficient opportunity to become intelligently informed before making his career choice and, if he is destined to become a clinician, that is, one who is directly and intimately engaged in the study and care of the sick person and his family, that he should have the full measure of the experience that is basic, fundamental, and unique to this role.

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Medical Students View Clinical Psychiatry

BY SIDNEY L. WERKMAN, M.D., STEPHEN LANDAU, M.D., AND HAROLD WAKEFIELD, M.D.

To investigate the relevance of various components of psychiatric teaching to the later practice of medicine, the authors asked 126 medical students to rate their perceptions of clinical psychiatric work and to assess their view of psychiatry before and after a clerkship. The students rated their experiences in descending order of usefulness as follows: outpatient treatment, emergency service, didactic seminar, child psychiatry, and inpatient treatment. They also recorded statistically significant changes in their perceptions of themselves with regard to psychiatric patients as they gained clinical experience.

THE STUDENT is both the subject and consumer of our efforts to teach psychiatry in medical school. Although

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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This study was supported in part by Public Health Service grant MH-05992 from the National Institute of Mental Health.

The authors wish to thank Gary O. Zerbe, Instructor in Biometrics, for his advice on the statistics and James Huber for his assistance in data reduction.

there has been a good deal of research into variables that affect student performance in psychiatry (1–4), we have little more than anecdotal and often idiosyncratic data on how medical students themselves perceive the usefulness of our teaching. One way to learn more about the appropriateness and effectiveness of our teaching principles and methods is to study the student's response to them.

In order to gain more precise information on medical students' opinions about the various components of their work in clinical psychiatry, we have devised a number of rating scales that attempt to relate the usefulness of psychiatric teaching to the later practice of medicine and that examine possible changes in the student during his clerkship. Obviously, these ratings tap a conglomerate group of factors including the student's interest, teacher popularity, chance, and anticipation, as well as the stated variables of "usefulness for the practice of medicine." A retrospective study after the student has been practicing medicine for some years would be necessary to give more powerful data on the questions asked. However, even this kind of study would be inadequate, since a physician's cognitive response would have to be matched against such other criteria as evaluating the quality of his actual clinical practice and ratings by external observers.

Since we cannot easily mount such a study, we offer the current one as a starting point for ongoing research. One point in favor of this methodology is that senior medical students at the University of Colorado School of Medicine are assigned to clerkships in medicine, surgery, obstetrics and gynecology, and pediatrics before they come to psychiatry; they thus have some realistic basis upon which to make judgments about what aspects of psychiatric knowledge they will need in their future medical practice.

GOALS

Before stating the results of our research we will give an overview of the goals and framework of our clinical teaching, for students only learn, if we are fortunate, what we attempt to teach (5). After a first-year course titled "The Human Life-Span" and second-year courses in psychopathology and psychophysiology, we divide our clinical goals, albeit arbitrarily, into external and internal ones.

The didactic or external goals are as follows: 1) knowledge of the spectrum of clinical psychopathology and psychiatric disorders; 2) understanding the natural history of psychiatric disorders (i.e., concepts of cure, adaptation, recovery, and residual deficit); 3) recognition of the significance of developmental phases, family structure, and social networks in psychiatric disorders; 4) experience with the dynamic interaction over time between the student and patients and the effective therapeutic use of that interaction; 5) management of psychiatric symptoms by psychotherapeutic means and the informed use of psychotropic drugs; 6) knowledge of the role models of psychiatrists, psychologists, social workers, and other mental health workers for later collaboration and emulation; and 7) preparing for the practice of medicine in a fashion that will facilitate the treatment of many psychological problems concomitant with physical illness, consultation with mental health workers, and the referral and reacceptance of psychiatric patients.

Since we view the clerkship primarily as an opportunity for medical students to gain intimate experience with patients, we have formulated several "internal" or intrapsychic goals for our teaching. They are defined as: 1) becoming more comfortable with psychiatric patients and not viewing them as "alien" (i.e., as fit subjects only for "alienists"), 2) becoming more knowledgeable about and accepting of the conflicts within oneself, and 3) learning to interact psychotherapeutically with patients without incurring undue anxiety or disabling defenses in oneself.

TABLE 1

Students' Ratings of the Usefulness of Clinical Psychiatry Sequences for the Practice of Medicine (N = 126)

Sequence	Mean
Outpatient clinic	4.94
Emergency room	4.68
Didactic seminar	4.61
Child psychiatry	4.30
Interview observation	4.10
Inpatient wards	4.09

RESULTS

We attempt to approach these goals through several teaching activities. Each medical student spends a full-time six-week clerkship in the psychiatry department during his senior year. His time, which is heavily weighted toward individual supervision and work with patients (and cannot be detailed in a short paper) is divided as follows: inpatient service, 60 percent; seminars and didactic sessions, 15 percent; child psychiatry, 10 percent; outpatient department cases, 5 percent; emergency room, 5 percent; and community psychiatry, 5 percent.

Each group of students rates these experiences anonymously, using a six-point scale ranging from "very useful" to "minimally useful." The categories the students rate include inpatient ward, outpatient work, child psychiatry, interviewing conference, family diagnosis, emergency room, didactic seminar, community psychiatry, and drug seminar; they are also asked for a global rating covering the entire clerkship.

In addition to these ratings we have considerable opportunity to discuss the clerkship with individual students and their supervisors. Table 1 shows that students rate outpatient work, emergency room experience, and a weekly didactic seminar (in which such topics as clinical aspects of child development, character types, syndromes, psychoactive drugs, and sexuality are discussed) highest with regard to their projected usefulness in prac-

TABLE 2
Student Views of Clinical Psychiatry

Items Rated	Clerkship	
	Beginning	Conclusion
Anxiety level with patients	3.59	3.51*
Empathy for patients	4.22	4.83*
Interest in psychiatry	4.33	4.71*

*Difference significant at p > .001 level, using two-tailed t test.

ticing medicine; they rate child psychiatry next and one-way screen interview observation and inpatient work lowest. These groups separate at the p > .05 level of probability using the Scheffe method for calculating analysis of variance.

From the ratings and our individual observations we tentatively concluded that students value most highly those experiences which present them with direct patient involvement and responsibility (6). For example, they consistently rated the outpatient clinic and emergency room experience, where they diagnose and treat patients as primary physicians or therapists, the highest in usefulness. Experiences that are closest to the medical model of their usual functioning as student physicians are the most congenial to them. Students are the most comfortable when a patient who is anxious and seeking help comes into "their " office. Apparently they also appreciate the structure and data of didactic seminars that explicate and supplement the major emphasis on patient-student involvements.

To assess student opinion about personal changes (internal goals) with regard to psychiatry and psychiatric patients during the clerkship, at the beginning and at the conclusion of the six-week clerkship, we ask them to anonymously rate the following items: "anxiety level with psychiatric patients"; "feelings (or empathy) toward patients with psychiatric problems" (rated from positive to negative); and "level of interest in psychiatry, psychiatric knowledge, and techniques." We do not show students their original ratings when they make their final ones (see table 2).

In all three dimensions the difference between the beginning and end of the clerkship was statistically significant at the p > .001 level of confidence, using a two-tailed t test. Anxiety level decreased; empathy or feeling for psychiatric patients increased; and interest in psychiatry all increased by the end of the clerkship.

Although we must emphasize that we are tapping opinion rather than observation, these results, when combined with supervisors' impressions and students' statements, do suggest that we are approximating the clerkship's internal goals, which center on helping the student become more clinically identified with the field of psychiatry and with psychiatric patients.

To gain further insight into the importance of the clerkship for students, we ask the following question at its conclusion: "What has been the single most significant experience or aspect of the psychiatric clerkship?"

The approximate percentage weights of the responses follow: *Individual supervision*—30 percent ("the one-to-one supervision by a psychiatric resident"); *Sensitivity group*—15 percent ("the leaders deserve a gold medal in the psychic winter olympics"); *Patient crises*—10 percent ("my patient made a suicide attempt and my self-searching"; "trying to reach a schizophrenic patient"; "when a patient's husband called and pleaded for help, I realized these people's problems are quite real"); *Self-examination*—10 percent ("I looked at myself for the first time in medical school"); *Positive patient movement*—20 percent ("being on my own with a patient and feeling good about it—for him and me"; "I began to think that maybe I could do something with psychiatric patients"); *No significant experience*—10 percent; *Miscellaneous*—5 percent.

DISCUSSION

A number of generalizations can be tentatively deduced from these data.

1. The high ratings given the emergency room and outpatient clinic rotations suggest that close, responsible involvement with patients is a most highly prized aspect of a psychiatric clerkship. In both of these services the student is the primary physician, and even though these very experiences mobilize a great deal of anxiety, the ratings given them highlight their importance for learning.

2. The total immersion in patient care offered by this kind of clerkship provides the student with an opportunity for involvement and informed self-searching through the use of supervision that is rare in other aspects of medical education. That at least 65 percent of the students rate some aspect of intimate patient observation or self-examination as the most important experience during the clerkship supports this view.

3. Supervision by residents is an effective method of increasing student involvement in psychiatry. Perhaps the issue is merely a contemporary historical one, but these data and our impressions suggest that students look for lateral or peer supports and teaching experiences even when more experienced professionals are available to them. Students seem to feel that psychiatric residents, who are often only one year ahead of them (since increasing numbers of residents do not take an internship), are closest to their concerns and needs. Our successful use of resident-run group sensitivity sessions for students is further evidence of this phenomenon.

4. The consistent statistically significant increases in interest in psychiatry as a field and in positive feeling or empathy for psychiatric patients during the clerkship offer some comfort to those who teach. Though a number of students in these "blind" ratings recorded a decreased interest or empathy from the beginning to the conclusion of their clerkships, the general trend is in the direction we would hope for. Since our work, more than that of many specialties, requires the cooperation of other physicians, we believe it important that students show some in-

formed tendency to identify with psychiatric patients and the field of psychiatry.

5. Observations in case conferences and didactic sessions, examination results, and the general appraisal of student knowledge lead us to conclude that many students do not remember and often cannot use concepts about dynamic psychopathology and development as they start the psychiatric clerkship. We have little hard data to support this view, although we think it is an important one that may lead us to restructure the courses offered in the first several years of medical school, particularly if other departments of psychiatry come to similar conclusions. The statistically significant rating at the start of the clerkship of lower interest in psychiatry as a field offers some buttressing to this point of view.

While earlier courses teach important general concepts, they apparently do not engage the student's continuing attention and interest. If this is so, the experiential aspect of the clerkship bears a heavier responsibility. In a charitable view, the knowledge gained from preclinical courses may follow the "positively accelerated curve" of learning, described by Dykman and Reese (7), that explains students' attempts to master material which is difficult, detailed, or conceptually novel. This view may also help explain something about the poor recall of material from earlier psychiatry courses.

CONCLUSIONS

We have relatively little systematic data on how medical students view the usefulness of their experience in clinical psychiatry. Because such data would help us structure our teaching more effectively, we have had students rate a number of dimensions of their clinical work around the concept of "usefulness for the practice of medicine."

The statistically significant results obtained suggest that students believe direct patient involvement and "medical model" responsibilities will have the greatest usefulness for the later practice of medicine. In a program organized around the concept of experiential teaching, students showed significant increases in interest in psychiatry and empathy for psychiatric patients and significant decreases in anxiety by the end of their clerkship period.

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Psychiatry in the Undergraduate Medical Curriculum

BY MORTON F. REISER, M.D.

Psychiatry in its teaching activities has the obligation to develop effective ways of bridging vast theoretical, empirical, and philosophical gaps that exist between nonpsychiatric physicians and biological scientists (without backgrounds in behavioral science) on the one hand, and behavioral and social scientists and other nonmedical professionals engaged in health care (without backgrounds in biology and medicine) on the other hand.

THE PROBLEMS AND THE WORRIES as well as the sense of excitement, challenge, and opportunity that we confront as psychiatric teachers in the seventies are part of the very real (and I think very urgent) identity crisis in which psychiatry and other mental health professions find themselves today. Among the multiple factors contributing to this general situation are several of particular relevance for the undergraduate medical curriculum.

To a large extent psychiatry is becoming a principal

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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custodian of the humanistic aspects of patient care in general hospitals and responsible for teaching its principles and practices to medical students. This problem is being magnified by the elimination of the internship requirement in a number of specialty areas as well as by an increasing need for programs that will train primary physicians.

The implications of developments in the social and community psychiatry movement, as well as changes in contemporary society, compel us to reconsider our ideas concerning the nature and cause of disturbed behavior. We must broaden the range of the responsibilities and concerns of psychiatry as a field, while paying greater attention to problems of health care delivery, to prevention, and even to participation in developing comprehensive health maintenance programs.

This rapid and extensive expansion of mental health practice into social and community psychiatry and into preventive mental health programs has led to inevitable blurring of professional role boundaries. But psychiatry (by virtue of its roots in neurobiology and medicine as well as psychology) stands as the mental health discipline best equipped to establish, nurture, and maintain realistic functional links with medicine and medical practice. As a result, psychiatry in its teaching activities has the obligation to develop effective ways of bridging the vast theoretical, empirical, and philosophical gaps that exist between nonpsychiatric physicians and biological scientists (without backgrounds in behavioral science) on the one hand, and behavioral and social scientists and other nonmedical professionals engaged in health care (without backgrounds in biology and medicine) on the other hand.

This latter (bridging) task is being rendered vastly more complex and demanding by the thrilling but relentless information explosion in the neurobiological, behavioral, and social sciences and by the concurrent expansion and increasing sophistication of related technologies. In its broad contemporary context the field of mental health can be regarded as encompassing a range of disciplines extending from molecular biology and genetics at one end, through general biology, medical biology, neurobiology, psychology, psychoanalysis, social psychology, sociology, and anthropology, and to political and administrative sciences and the emerging new applied science of urbanology at the other. The range of disciplines and information is indeed vast.

Meanwhile, the information explosion has necessitated fundamental changes in pattern and content of the undergraduate medical curriculum, within which our teaching of psychiatry must be fitted and accommodated (e.g., the new track curriculum).

CONTENT OF THE CURRICULUM

It is not difficult to construct a list of topics and areas that psychiatry should include in its part of the undergraduate medical curriculum. First, it must teach the basic biological, psychological, and sociological aspects of the behavioral sciences that are relevant and necessary for developing in the student a theoretical base for understanding human behavior in health and disease.

Second, it must teach the basic knowledge of clinical psychopathology and impart the technical interviewing skills that all physicians should have in order to make diagnoses—to recognize and deal with behavioral emergencies, to make effective referrals, etc.

And third, it must impart to students an intimate working knowledge concerning the interaction of emotions and physiologic functions in health and disease: both the impact of illness upon the psychological state of the patient and the role of emotions in medical pathogenesis and the cyclic feedback interplay between these two kinds of reactions. This means preparing future physicians (particularly primary physicians and generalists of the future) to apply modern psychological, psychophysiological, and psychosocial understanding in all phases of medical practice: diagnosis, treatment, and research. As mentioned earlier, teaching around the issues that are related to the ***human*** needs of individual patients will be a major responsibility of psychiatry during the next decade, and it will require considerable manpower and resources. Furthermore, the increasingly important role of liaison psychiatry in the general hospital constitutes an urgent research challenge; studies are needed to broaden and deepen our understanding of the interactions between emotional and physiological states not only within individual patients, but also within the hospital viewed as a social system. This involves the interactions within the social ward milieu between staff and patients and the impact of these transactions upon physiologic systems and upon the clinical course of disease in individual patients.

I will not dwell on specific details of this list, nor do I feel prepared to attempt even a preliminary scheme for fleshing it out and updating it in accord with contemporary demands. These issues have been thoughtfully and extensively dealt with by others (1–3). Rather, I want to highlight some of the critical issues that demand consideration before these other matters can be dealt with. We must first be clear about what it is we have to teach, as well as what psychiatry and psychiatrists are to be and what they are to do in the professional world into which our students will graduate.

MAN IN HIS BIO-PSYCHO-SOCIAL FIELD

States of health and illness can be fully understood only in terms of three parameters: the biological, the psychological, and the social. Comprehensive health practices require a repertoire of skills pertinent to dealing with problems in all three of these critical dimensions. Clearly, an ever-increasing variety of professionals and specially trained workers from an increasingly wide spread of disciplinary backgrounds will be needed to cope with these problems, and no single specialist (including the psychiatrist) can or should be expected to attain authoritative mastery across the entire spectrum.

Man in his bio-psycho-social field can be viewed as

part of an open system that allows for an uninterrupted two-directional flow of information and energy transactions extending from the deepest and most minute recesses of the body, i.e., from intracellular metabolic processes, all the way to the social field in which the individual lives, including the cultural forces and even the historical forces that helped to shape that culture.

At the center is the brain, which somehow mysteriously subserves the higher mental functions (the province of the clinical psychiatrist, psychoanalyst, and psychologist). The higher mental functions in turn subserve the interpersonal relations and the individual transactions with the social environment, including immediate family, small social groups, and society at large (behavior). The brain, on the other hand, also somehow mysteriously "transduces" (4) immaterial (nonphysical) social experience into physiological (physical) events within the central nervous system. These events may then initiate physiologic change throughout the body; brain function can in turn be affected by physiologic changes in the periphery of the body, these exchanges being negotiated by the central and autonomic nervous systems and the neuroendocrine systems that link the brain with the entire organism, including its most remote and minute recesses.

Psychiatry, in addition to doing its own thing, will need to take on new roles that will facilitate linkages and provide communication bridges in theory, practice, training, and research between vast numbers of workers from a wide variety of disciplines, all of whom will have important roles in the mental health field as so broadly defined. The fact that the psychiatrist is a physician with skills and understanding related to the function of the brain and its relation to the body as well as to mental and social life constitutes his unique qualification for special and key roles in the complex, sprawling mental health field.

In respect to theory, the psychiatrist as physician can help in efforts that aim to provide conceptual linkages between biology on the one hand and the social sciences on the other. In practice, the psychiatrist will have to function as coordinator between basic biologists who do not (and need not) have training or an interest in social science and mental health workers from the social field who do not (and need not) have training in medicine or biology. In teaching and training, psychiatrists will need to contribute to programs that prepare not only psychiatrists but also workers in the nonpsychiatric allied professions. In research his role may be of a bridging, coordinating, collaborating nature; sometimes he will most appropriately assume an executive role. Each individual psychiatrist of the future will need to be trained in some realistically defined area or sector of the broad field (e.g., a subspecialty) and also to work in new roles that will facilitate linkages and provide the communication bridges already described.

Obviously, no one discipline can be expected to master and direct the whole thing. Psychiatrists will probably lead in many sectors, follow in others, collaborate in others, and play executive-coordinating and educative roles at other appropriate points.

Whatever his special area, the irreducible core or base of training for every psychiatrist should prepare him for his role as a *physician*-clinical mental health specialist who will be able to talk across, around, and about the mind-brain and the brain-body articulations.

This, I think, is what we must constantly keep in mind as we try to grope our way through the training challenge of the seventies. Psychiatry must not lose its connections with its central neurophysiological and medical roots and underpinnings.

CONCLUSIONS

Accordingly, at the moment I conclude that beyond the relatively simple issues of content and technical skills noted earlier in my list, it will be of utmost importance for us to impart to all students of medicine concepts and perspectives that they may then use: 1) to aid them in their attempts as physicians to deal with the psychological and humanistic aspects of their work, 2) to assist them in their attempts to deepen and extend their conceptual understanding and appreciation of the complexities of mind-brain-body interrelationships in health and disease, and 3) to provide a conceptual schematic matrix into and onto which they can superimpose, fit, and integrate all of the new information that is sure to emerge in the years ahead as the information explosion continues.

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A Test of Clinical Learning by Medical Students

BY ROBERT J. THURNBLAD, M.D., HYMAN MUSLIN, M.D., AND JOHN LOESCH, M.D.

The authors compared the performance of different classes of medical students on an examination using videotaped clinical material. Although the examination was designed to test some aspects of clinical learning, the principal finding was that students achieved high scores at the end of two years of preclinical work; after that no further increment was found. This points up the need to evaluate test instruments carefully and especially to continue direct assessment of students doing clinical work.

ONE OF THE MAJOR RESPONSIBILITIES of medical schools is that of certification—that is, the issuing of a public statement proclaiming that a student has reached or exceeded a certain level of performance in the general practice of medicine. The granting of the degree certifies that the student has mastered a given body of medical knowledge, has acquired the ability to function effectively in the clinical situation, and possesses certain other qualities or attitudes felt to be necessary in a physician. The problem of assessing these criteria in our students remains a major concern for medical educators. As we become more sophisticated in the application of principles of teaching and learning to our curriculum design and instructional methods, it also becomes clear that we must also be able to evaluate the complex aspects of clinical learning. It is important that our assessment methods be reliable, that they validly measure desired objectives, and that they be efficient in the sense that they can be applied to large groups in a limited period of time. Our students also rightfully demand that tests provide educational feedback (1).

Several years ago Miller and associates wrote:

> Written tests should certainly be used to measure knowledge, but other devices are needed to measure the students' acquisition of skills, attitudes, interests, habits, and ethics. Because these latter qualities are difficult to measure, while the measurement of information learned is relatively easy, a faculty may conclude that if a student acquires information the other objectives are being met. But this is not the case. The excessive or exclusive use of objective or essay examinations to measure the student's progress can lead only to the misconception that the major goal of instruction is the successful completion of tests in several subject areas (2).

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There have been several studies by psychiatric educators who have tried to devise methods of assessing clinical psychiatric skills. Direct observation of a student's interview behavior has been done, but it poses problems related to inefficiency and to difficulties concerning the reliability of raters. In 1958 and 1960 Stoller and Geertsma (3, 4) designed the prototype of several tests, using filmed interviews and a long list of statements permitting a description of patients including their defense mechanisms and, to some extent, their psychodynamics. They were able to demonstrate that changes occurred during the course of medical school—the seniors making judgments that more nearly approximated those of experienced psychiatrists. They also felt that this method measured skills beyond factual knowledge and that it measured something more than common sense or ability to take examinations.

A comprehensive study of changes in clinical judgment as a function of psychiatric education was done by Salzman and Goldstein (5) at Rochester, N.Y., using statements like those of Geertsma and Stoller (4) with an audiotaped interview. They also found a positive increment with psychiatric education and experience, although there were a few exceptions that will be discussed later. Langsley (6) also confirmed that filmed interviews could be used to show differences among different groups of students, interns, or residents. Using the films designed by Strupp to measure skills in psychotherapy, Monroe (7) correlated film test responses with clerkship evaluation and factual knowledge. He found a better correlation between clinical test performance and clerkship performance than between factual examination and clerkship performance. All of these studies were attempts to approximate a measure of clinical skills and to go beyond measurement of just factual knowledge.

Despite these promising studies, the integration of the assessment of clinical skills into the certifying examinations of most schools has not been impressive. At the Conference on Psychiatry and Medical Education held in 1967 (1), the commission on methods reported on the senior examinations in psychiatry of 60 medical schools. Eleven reported they utilized the National Board of Medical Examiners score in psychiatry as their evaluation criterion. Thirty-three of the 60 sent copies of their senior examinations. The commission reported: "By and large, the examinations submitted by the thirty-three schools consisted of questions assessing the recall of relatively isolated fragments of information" (1). The overwhelming majority of the examinations were objective, with relatively simple item types (e.g., true-false, sentence completion, multiple choice, matching). Only a

handful of the examinations reflected the work of those with special experience and competence in examination construction. In most of the examinations there was little resemblance between the test items and the goals and objectives of psychiatric education specified in the Conference on Psychiatric Education held in 1951. "The disparity between our previously stated goals and our examinations as a whole constitutes a major problem," was one of the conclusions of the 1967 conference (1).

To bridge the gap between the yet unsolved problems related to the direct measurement of clinical skills and the tendency of written examinations to be limited to the assessment of factual knowledge, test questions are being developed that require problem solving in simulated clinical situations (8–10). The present study deals with the performance of medical students in a simulated clinical situation—a videotape of a psychiatric interview. It is an attempt to approach the objective measurement of psychiatric clinical skills.

METHOD

An examination was designed that was thought to approach problems encountered in an actual clinical setting. A videotaped psychiatric interview was shown and students were tested on certain observations, hypotheses, and inferences covering a general range of clinical psychiatry, emphasizing psychodynamic observations and principles. A series of statements was composed by the authors (all of whom are experienced in clinical work, teaching, and evaluation design) and the students were asked to choose among the following:

1. if the statement describes *directly observable* behavior and/or *summarizes specific statements* made by the patient;
2. if the statement represents an *interpretation* that can be inferred reasonably from what occurred during the interview;
3. if the statement is *contrary to the evidence* and can be rejected on the basis of what occurred during the interview;
4. if the statement cannot be supported or refuted either by direct observation or interpretation of what occurred during the interview, i.e., there is *insufficient data* to judge the validity of the statement.

We believe this type of examination requires a combination of observational skills, understanding of psychiatric knowledge and theory, and (on some items) a degree of empathic understanding. We also believed that the test approximated a clinical situation because it used a videotape of actual clinical situations, it required the students to differentiate between observation and inference, and it required them to identify the data or reasons for their choices.

The test was given to five groups of students: entering freshmen, freshmen, sophomores, juniors, and seniors at the end of that year of education. The test was also given to a group of faculty to test its validity.

The "correct" answers were those selected by the authors after careful scrutiny of the tape and transcripts. Those items which appeared ambiguous to the faculty were deleted; there were no items in which a high number of the faculty selected a choice other than that chosen by the authors.

RESULTS

The means for each group were determined and compared using Duncan's Multiple Range test as modified for the situation in which the number of observations per group are unequal (10, 11). The means for the different groups were: entering freshmen: 46.1; freshmen: 53; sophomores: 58.1; juniors: 57.2; seniors: 58.4; faculty: 63.

Using this test, any two means not underscored by the same line are significantly different ($p = .05$). Any two means underscored by the same line are not significantly different. Thus there were significant increments in mean scores between entering freshmen and freshmen and again between freshmen and sophomores. There were no significant differences between sophomores, juniors, and seniors. The faculty mean score was significantly higher than that for all groups of students.

Two findings appear to stand out from these results: first, the test does appear to be a valid and useful measure of combined observational skills and psychiatric knowledge, and we find the expected improvement in scores by freshmen and sophomores, indicating that the desired learning has occurred. Second, however, we find no change between sophomores and groups of students at the clinical level (juniors and seniors) on an examination that was intended to simulate a clinical task and measure clinical skills.

DISCUSSION

The students as a whole, including the clinical students, performed well on the examination—that is, the scores of sophomores, juniors, and seniors approached those of the faculty. However, the principal finding was that clinical experience in psychiatry and/or other disciplines did not enhance student performance. Our findings corroborated those of Salzman and Goldstein (5), who used an audiotape and statements modeled after those of Geertsma and Stoller (4). They also found a plateau effect at the sophomore, junior, and senior levels. Others have found a graded improvement throughout the four years of medical education. However, we believe it is important to emphasize that a test designed to evaluate clinical skills may turn out instead to be a useful instrument for evaluating the knowledge and observational skills of preclinical teaching but may not measure what (if any) learning occurs during clinical work. We have considered the following hypotheses to explain the plateau effect for sophomores, juniors, and seniors:

1. We may have reached a fairly high plateau (sophomore, junior, and senior scores approximate faculty scores).
2. Freshman and sophomore courses were taught by the people who wrote the exam, while clinical students

were taught by a diverse group of faculty and focused on therapy with a small number of patients (however, all students were taught by the authors at some time and clinical students did have some further didactic work as well as patient contact).

3. No further learning occurs.
4. Learning that does occur is not measured by this test.

We believe that the last is the most likely possibility. Direct observations of students at work with patients, other types of tests, and student ability to observe data and formulate diagnostic and dynamic hypotheses all seem to improve during clerkship.

In watching a videotape, the student is asked to identify with the interviewer in such a way that his findings can reflect empathic as well as cognitive modes of observation. In order to obtain complete observations, an interviewer must include observations in which he can introspect vicariously and thus can get close to what the patient is experiencing from moment to moment. This hoped-for result in watching a simulated situation is seldom reached at a level that mimics the actual clinical encounter with a patient.

Our anecdotal finding through the years has been that students' observations during "watching" never match their observations while "doing." Sometimes their reactions are so influenced by their anxiety over data gathering and difficulties in their subjective responses that their observations are grossly inaccurate. At other times their observations correctly reveal empathic modes of observation. We have seen the difficulties in observation for the past several years while watching our freshmen students conduct diagnostic interviews. The concern of these preclinical students about the mechanics of data gathering and their uneasiness over the role of data gatherer so influence their observing capacities that their ability to see behavioral data is quite limited. Watching a videotape equalizes the situation so that less advanced students with clinical sophistication can better compete with advanced students. What was being tested was the student's ability to evaluate data presented in a relatively neutral way—i.e., he was a passive observer of a videotape. We recognized that we were not attempting to assess the student's ability to obtain data or otherwise perform in the actual clinical setting. However, we must recognize that we are still short of our goal of evaluating the student's ability to evaluate data and form hypotheses in a true clinical encounter.

Evaluation of psychiatric learning has in the main used instruments to measure outside knowledge or data that may or may not correlate with actual clinical proficiency. In psychiatry, clinical proficiency begins with the capacity to observe behavior during an interview (12). The next set of skills and knowledge that comes into play deals with the ability to collate the observed data into a frame of reference for understanding, ultimately leading to an appropriate therapeutic rationale. As noted previously, since many factors may interfere with the data-gathering process in such a way that the capacity to observe is interfered with, the capacity to observe during the interview cannot be taken for granted.

Some tests have been designed that correlate with direct observation of a student's performance, but an exceedingly high correlation would have to occur to justify their use as a valid measure of students' actual clinical performance. Simulated patients, patient management problems, and computerized patient responses offer some promise and need further study. However, we feel it is vitally important to attend to the operational aspect of psychiatric learning in which an appreciation of the ongoing state of the patient is essential in assessing the emotional status. Thus, in our view, measures of evaluation to accurately assess learning of clinical psychiatry must include instruments to evaluate the student's performance with real patients.

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Psychiatry in the Functionally Organized Undergraduate Curriculum

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The functionally organized curriculum permits the integration of psychiatry into most of the courses that comprise the first two years of medical school. Rather than presenting psychiatry to the student as a separate discipline or centering the acquisition of interpersonal skills around specific psychiatric diseases, this system introduces psychiatric concepts in their natural context, as they arise in conjunction with disease in functioning human organ systems.

PUBLIC REACTION to the Flexner report turned American medical schools to their present intensive utilization of the physical medical sciences as the basis of the preclinical curriculum. Traditionally the prospective physician is successively trained in the theory, data, and research methodology of each of the basic medical sciences. This has better prepared our students for graduate study than for coping with the human, social, organizational, and political aspects of health care.

There has lately been a trend away from the traditional medical curriculum of two years of preclinical study in basic sciences and two years of rotation in clinical services. In its place there has been developed an abbreviated core curriculum, followed by multiple tracks, one of which the student selects as an area of specialization. A second important change is emerging as medicine redefines its traditional humanistic goals to deal more broadly with social issues and human values. This involves the addition of socially based goals to the traditional objectives of a basic medical science program.

The 1960s can be described as a time of social turmoil manifested in widespread, often diverse social movements seeking reform in the health, social, welfare, political, and economic spheres. Medicine was not immune to the reforming fervor of this period. Medical students and young faculty activists raised questions about the responsibilities of the medical profession. Attention was directed toward providing medical services to the indigent, the problems of the urban ghetto, serving the rural poor, fees for service, and the impact of hunger, family planning, racism, housing, and environmental conditions on the quality of human life.

While this might be called social humanism, there has been increased attention to a value-oriented humanism. This is supported by the impact of the dramatic technological advances of the past decade. These advances raise questions about the definition of death, the prolongation of life, the availability of voluntary abortion, and other moral concerns. Neither social nor value-oriented humanism proposes a scientific study of these issues in order to understand the psychological and sociological implications of the present state of affairs. In our opinion, change in the medical curriculum awaits a scientific study of man in relation to technological medicine and society. This mixture of science and humanism combines the systematic, deductive orientation of science to the data it studies with the compassionate, empathetic, experiential focus of humanism. It is from study, in these terms, of the present human condition that we can redefine the role of the physician in relation to the society that he serves.

THE EXPERIENTIAL IMPACT OF MEDICAL EDUCATION

Our medical schools make overwhelming and inhuman demands. Issues of life and death are presented to the student with a minimum of preparation and with no opportunity for him to explore his human reactions to these basic human experiences. There appears to be a one-to-one correspondence between those issues the physician is not prepared to discuss with his patients and the psychic shocks the student has been left to deal with—cadavers on the dissection tables and death at the bedside, sexuality in the student's marriage and in the physician's consulting room, the fear of death in the student's patient in physical diagnosis and in the physician's patient when he discovers a fatal disease, feelings suppressed by the student in competition with other students and inadequately understood by the physician in practice when expressed by his patients. We prepare ourselves and our students insufficiently to meet their needs and the needs of their patients in the area of personal human experience. The most primary, pervasive, pressing, and human experiences become foreign to our students. Interpersonal closeness, accessibility of one's own feelings, integrated sexual gratification, and a realistic understanding of death are not part of the physician's personal life

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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TABLE 1
Curriculum for Schools of Medicine and Dental Medicine: 1971–72

Subject Committee	Class Starts	Final Exam	Class Hours
FIRST-YEAR SCHEDULE			
Cellular and Molecular Biology	9/9	11/10	162
Social and Behavioral Sciences	9/10	10/15	84
Introduction to Clinical Medicine	9/10	6/2	140
Tissue Biology	11/11	12/18	143
Pathobiology	1/3	2/16	195
Musculoskeletal System	2/17	3/15	115
Central Nervous System	3/16	5/6	187
Electives	5/8	6/3	108
Final exams	6/15–16		
SECOND-YEAR SCHEDULE			
Renal-Urinary System	9/8	9/29	91
Introduction to Clinical Medicine	9/10	6/2	140
Cardiovascular System	9/30	11/3	139
Respiratory System	11/4	12/1	100
Gastrointestinal System	12/2	1/22	150
Hematology	1/24	2/12	84
Endocrine and Reproductive System	2/14	3/25	167
Growth and Development	3/27	5/6	138
Electives	5/8	6/3	108
National Board Exams	6/12–16		
ELECTIVES			
Noncredit:			
Man and Society	10/18	3/27	80
Psychopharmacology	10/18	3/27	80
Human Personality: A View from the Cinema	10/18	3/27	80
Credit:			
Human Relations	5/8	6/3	108
Human Sexuality	5/8	6/3	108

armamentarium for dealing with his patients and their diseases.

Another problem in medical education somewhat related to this is the isolation of learning about human functioning and human disease from personal experience with the patient, his disease process, and its ramifications in the patient's life and the lives of those with whom he lives. The design of the medical school curriculum and the impact of modern technology pull the student away from learning about people and their diseases as a consequence of personally meaningful and interesting experiences with patients. He learns by rote, dictate, or instruction the facts of disease development. He does not have an equivalent experience of the interaction of human systems in the production of diseases.

Psychiatry in particular has been at a disadvantage in the medical school curriculum because of its separate presentation as course material distinct from the other basic medical and clinical sciences. Too many students become interested and adept in psychiatry only to leave these newly found skills for use with "psychiatric patients" when they return to their medical, pediatric, or other rotations. It has been a problem to integrate a student's learning about the psychological dimensions of patients with his appreciation of patients' physical illness and to integrate the acquisition and application of psychotherapeutic skills for nonpsychiatric patients with the acquisition and implementation of physical diagnostic and therapeutic skills.

THE RELEVANCE OF PSYCHIATRY

Psychiatry potentially offers in its body of knowledge about human behavior the opportunity to understand and interact with each of these problems. The focus of modern dynamic psychiatry on understanding in personal terms the individual's experience uniquely arms psychiatry, among all of the medical sciences, to uncover and clarify the impact of experiences during medical education on our own lives and practices. All of us would agree that the student, faced as he is by a unique and nearly overwhelming experience when he is first presented with a cadaver, a dying child, or a sexually seductive patient, would probably benefit from the opportunity to reexamine in a more reflective setting his own reactions, thought associations, and action tendencies and to reconsider his choice of behavior in terms of this more carefully thought-out review of his reactions.

Under these circumstances, traditional defenses or defensive resolutions—adopted from medical student lore, identification with faculty members, conceptions about the physician's role, or other sources—might be avoided as new options for behavior are brought into the situation and become viable choices for the student. In order for psychiatry to participate in this personal growth of students, it has to be more closely integrated into the student's medical school experience and readily available in times of crisis, as well as being an ongoing resource in the delivery and teaching of humanly oriented services.

In practical terms this means teaching the basic and clinical sciences as they impinge upon or derive from the world as experienced by the student. It also means we must pay more attention to the student as an individual and to his personal adaptation in medicine.

The functionally organized curriculum centers all the relevant basic or clinical sciences around the organ or social systems and so more closely approximates the student's experience of health and disease in himself, his family, and his present patients. Psychiatry can be usefully integrated into almost all courses that are functionally developed around the organ systems. This provides a unique opportunity for the student to grasp, in a personally integrated way, the physical and psychodynamic aspects of each of his patients' diseases.

UNIVERSITY OF CONNECTICUT UNDERGRADUATE EDUCATION PROGRAM

The University of Connecticut Health Center consists of the University of Connecticut School of Medicine and Dental Medicine. A common program for medical and dental school students during the first two years covers the basic behavioral and biological sciences under a series

of teaching committees (tables 1 and 2). The final two years are devoted to clinical training, with the opportunity for the student to select a specialized area of study and to spend as much as the last year and a half in this area. The uniqueness of the functionally organized curriculum for psychiatry is in the diversity and breadth of social-psychological and personality theories that can be presented.

Social and Behavioral Sciences, one of the first teaching committee courses in the first year, deals with the individual in relation to the family, social organization, and society at large. It provides an introduction to the interaction of man with society, with particular attention to the social behavior of health providers and health seekers. It aims to prepare the student for understanding and interacting with the health system of our society.

The Central Nervous System Subject Committee presents the final first-year course. Here individual psychopathology is studied from three perspectives: symptom recognition and descriptive diagnostic psychiatry, the dynamics operative in the major disease categories, and biological considerations in behavior, including genetics, dream research, ethology, and other concepts in biological psychiatry.

The other organ system teaching committee courses are given during the second year. The courses of the Respiratory, Cardiovascular, Gastrointestinal, and Endocrine and Reproductive Committees provide the opportunity to give the student didactic, clinical, and laboratory experience in the physiological-psychological interactions that operate in the production of disease. Duodenal ulcer, reproductive hormonal influences on mood and sexual activity, family interaction in asthma, and hypertension each provide the opportunity for a balanced presentation of relevant physical and psychological perspectives. The student's experiences in dealing with these diseases play an important part in sensitizing him to the relevance of psychological factors in physiological disease.

Growth and Development, the final course in the two-year base curriculum, studies personality from the perspective of the life cycle. The individual's growth and development are reviewed, with particular attention to the interactions of physical and psychological change and to the unfolding complexity of the developing individual.

Students pursue individual interests in electives offered throughout the first two years. Most teaching committees offer up to 20 hours of an elective, with a separate one-month elective period scheduled in each of the first two years. Each student engages in a supervised project, and tutorials with faculty members are available. An important aspect of this diversity is that it encourages the development of special interests on the part of individual students and facilitates the ongoing, in-depth, personalized contact of faculty and student as common interests are identified and explored.

The focus on interdisciplinary study is continued in the Introductory Clerkship that begins the third year. During this required three-month clinical experience, patients are worked up from both medical and psychiatric perspectives. Preceptors from internal medicine, pediatrics, and psychiatry are available and the student is encouraged to focus on the patient and to use specialized medical programs as a resource. By simultaneously assuming responsibility for the physical, psychological, and social needs of his patients, the student appreciates how overly specialized medical services can fractionate care.

TABLE 2
Psychiatric Teaching in the Curriculum

Subject Committee	Class Hours	Laboratory or Project Hours	Hours in Clinical Setting	Total
FIRST YEAR				
Social and Behavioral Sciences	10	20	10	40
Introduction to Quantitative Biology	2	—	—	2
Musculoskeletal System	2*	—	4*	6
Central Nervous System	25	18	8	51
SECOND YEAR				
Cardiovascular System	2*	—	4*	6
Respiratory System	2*	—	4*	6
Gastrointestinal System	6	4	4	14
Endocrine and Reproductive System	4	20	4	28
Growth and Development	23	20	1	44

*Proposed for addition to or scheduled for inclusion in curriculum as psychiatric teaching personnel become available.

ADVANTAGES OF THE FUNCTIONAL CURRICULUM

The initial reactions of our department of psychiatry to a functional curriculum were negative because of the implications in our minds of not having a separate, clearly defined psychiatry course during the first two years. Experience has changed our opinion to enthusiastic support for its advantages over traditionally organized medical education.

We found we could meet our psychiatric training objectives for undergraduates by presenting descriptive, dynamic, biological, and psychosomatic psychiatry in the courses of the various teaching committees. Using new methods of organization, we variously combined didactic, laboratory, and clinical sessions to provide a broad basic psychiatry experience for our students.

A clearly defined or identified didactic psychiatry course in the curriculum isolates this learning for the student and leaves it to him to develop his own links between psychosocial and physiological disease parameters. Too often, for medical students this has meant the neglect or rejection of the psychological, social, and experiential aspects of their lives and their patients' lives. The effective integration of psychiatry's viewpoint with those of the basic biological and clinical sciences in each of the organ system teaching committees does not emphasize psychiatry to the student as a separate discipline, nor does it center the acquisition of interpersonal skills around spe-

cific psychiatric diseases. Rather, it introduces psychiatric concepts in their natural context, as they arise in conjunction with disease in functioning human organ systems.

Through the functional curriculum we achieve an increased sensitivity in students to their own and to their patient's psychosocial experiences. The experientially learned responsiveness is actually more difficult to achieve in traditional curricula, where learning about the human experience of health and disease is fragmented and deemphasized in the basic science years and lost in the complexities and technology of specialization in clinical rotations. Of particular importance for understanding the impact of a functionally organized curriculum is the naturalness with which physiological and psychological aspects of disease can be meaningfully and directly a part of the student's basic science and clinical experience.

Teaching psychiatry in context with other medical subjects also has the advantage of distributing psychiatric teaching over all the student's basic science and introductory clinical courses during the first two and a half years. Psychiatry is not presented in a single block, with the student's attention turned full-time to the acquisition of a defined body of knowledge. Rather, the student, in his orientation to patients and to their diseases, is repetitively called upon to consider the interrelations among the patient, the disease process, and the patient's psychological functioning and personality structure. Previously introduced concepts are applied in new contexts in which their learning and mastery are reinforced by their use in analyses of varied and diverse clinical experiences.

A particularly useful device has been the establishment of time within each of the organ system teaching committees for students to pursue special areas of study. The 20- to 24-hour special clinical or laboratory project within subject committees gives psychiatry an opportunity for more individualized experiences in depth as a further basis for student growth. We have designed projects for studying response to psychotropic drugs, psychophysiological interactions in patients with duodenal ulcer, and sexual responsiveness during the menstrual cycle. These provide students the opportunity to interview numbers of patients with psychobiological disease disturbances. This broadens the student's clinical experience and provides a more diverse opportunity for the student to become aware of the ramifications of disease and its implications for patients' lives. Required research projects and elective courses in the basic science and clinical years each provide additional opportunity for students to discover and pursue areas of special interest. Commitment to teaching basic principles as they arise in the course of a student's pursuit of individual interests emphasizes active, self-guided learning and avoids the sterility of didactically transmitted information and skills.

Student response to the program has been increasingly positive. It has been particularly gratifying to find students developing strong personal interests in specific activities within the curriculum. The emphasis on creating learning opportunities in which students work directly with individual faculty members, over significant periods of time, encourages individual students to pursue more intensive study of areas of particular interest. This is reflected in the increased responsibility each student takes for his own learning.

We have discussed the participation of psychiatry in a functionally organized curriculum. Students in the program we have developed achieve adequate knowledge of areas of traditional concern. We propose that in addition they have a more general appreciation for the importance of psychological behavior in all aspects of health care, as a result of the systematic presentation of psychiatric concepts in the general medical context. This aids the student in accepting learning about psychological functioning as a natural part of his medical experience and does not reinforce the defensive resistance many students develop when psychiatric information is forced upon them in traditional didactic settings.

A Medical Interviewing Course: Objectives, Techniques, and Assessment

BY DAVID W. CLINE, M.D., AND JUDITH N. GARRARD, PH.D.

The authors describe a course for teaching medical interviewing skills to medical students. Course components included a programmed manual, observing a skilled interviewer, role-playing exercises, programmed medical interviewing films, and interviewing patients. The majority of the course was conducted in a small-group setting during a one-week period. Student participation was emphasized in course planning and discussion groups and as learners and teachers. Students and instructors rated the course as above average to excellent. The students showed a significant learning gain in medical interviewing techniques.

OVER THE PAST SEVERAL YEARS, medical interviewing skills have received increased emphasis. The focus on family practice and comprehensive medicine and the demands of the consumer that he be skillfully interviewed and be made to feel that the physician is interested in him are forces within our society which require that more training be focused upon the skill of interviewing. Teaching interviewing skills has been initiated in graduate training programs in psychiatry, clinical psychology, social work, and more recently in the undergraduate medical school curriculum. Although several formats for teaching interviewing skills have been described (1–6), course objectives, teaching techniques, and assessment of outcome (especially student-teacher satisfaction and student gains in learning) need further clarification by research.

The department of psychiatry at the University of Minnesota Medical School is responsible for teaching medical interviewing techniques to the phase B (second-year) medical students in the recently revised medical school curriculum. The purpose of this article is to describe this course, outlining course goals and components, teaching techniques, and assessments of what the students learned and their satisfaction with the course; the latter aspect has become an important one in the new student activism movement.

COURSE DESCRIPTION

An interdepartmental committee consisting of several faculty members and two first-year medical students planned the course. The first step in course development was to specify the body of information to be presented. The optimal interview was defined as one in which the greatest amount of accurate information relevant to diagnosis and management was obtained in realistic time limits (2). The course goals were as follows: 1) to increase the student's attention to process information; 2) to encourage techniques that maximize the opportunity for observing the patient's characteristic behavior; 3) to encourage the interviewer to limit his own activity and to encourage the patient's activity; 4) to encourage the interviewer to exercise the least possible control over the patient; 5) to encourage the interviewer to allow the patient to tell his own story with minimal intervention; and 6) to encourage the interviewer to create and maintain a supportive emotional atmosphere. The course was given during a one-week period at the beginning of the second year of medical school, before the students performed medical workups. There were 12 hours of required attendance and six hours of optional attendance.

During the first hour (required) of the course, a pretest was administered to the class (N = 233) in a large-group setting. The quiz, in the form of two films, depicted interviews with white, middle-class, male patients in whom carcinoma was suspected. The test had 18 nodal points, with three alternatives at each point from which the student chose one response. These test films were part of the series "Programmed Instruction in Medical Interviewing" done by Enelow and associates (7), and their purpose was to test cognitive learning (8). Also included during the first hour were a general introduction to interviewing techniques, the reading assignment, and course goals and format.

Medical Interviewing: A Programmed Text (6) was the required text, which students were to read at the beginning of the course. This manual focuses on the format, style, and phrasing of questions and responses to fit the many types of situations that occur in interviews. Approximately 20 types of responses are defined, illustrated, and programmed (e.g., facilitation, confrontation, silence, open-ended questioning, support, reassurance, empathy, and reflection); from these the student can learn to construct his own responses of each type.

The major portion of the course was taught in a small-group setting (eight to 14 students), led by an instructor from psychiatry, psychology, or social work. During the first of five required two-hour blocks, the instructor demonstrated interviewing techniques by interviewing a hospitalized patient. The interview, which was audiotaped, lasted about 25 minutes and was followed by students asking the patient open-ended and direct questions. The group then discussed the interview, and the patient participated by reporting his reactions to the experience. In this setting the students observed a skilled interviewer; the patient's presence served to decathect the anxiety surrounding the interviewing experience.

Two small-group sessions that followed were devoted to role playing. Each student was asked to learn a patient's history, and then a fellow student interviewed him. Subsequent reversal of roles allowed the student to experience the interviewing process as a "patient," gaining greater appreciation of the importance of the interview. The instructor could also interview a programmed "patient," further demonstrating effective techniques and dispelling the notion that role playing is ineffectual as a learning tool. Audiotape recordings were used as a teaching aid to point out students' errors.

The final two small-group sessions were devoted to students interviewing hospitalized patients. Two students—one an interviewer, the other an observer-recorder—went to a hospital station and interviewed a patient for approximately 20 to 30 minutes; the interview was audiotaped. Following the interview, students returned to their small groups where the student observer-recorder critiqued the interview. The instructor used the audiotape recording to provide critical feedback to the student-interviewer. Interviewer-observer roles were subsequently

Read at a panel at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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The evaluation and statistical analyses were supported by Health Professions Special Project Grant Program grant ME-00109 from the National Institutes of Health.

TABLE 1
Student-Instructor Evaluation

Area	Student Ratings (in Percentages)			Mean Ratings	
	Excellent or Above Average	Average	Below Average or Poor	Students	Instructors
Course Goals: Rate how well you feel you (your students) accomplished each goal in this course.					
1. To increase the student's attention to process information	83	14	3	1.80	1.57
2. To encourage observation of the patient's characteristic behavior	81	17	3	1.85	2.12
3. To encourage the interviewer to limit his own activity and encourage activity on the part of the patient	88	11	2	1.69	2.05
4. To encourage the interviewer to exercise the least possible control over the patient during the interview	76	19	5	2.00	2.24
5. To encourage the interviewer to allow the patient to tell his own story with minimal intervention	85	12	2	1.71	1.81
6. To encourage the interviewer to create and maintain a supportive emotional atmosphere during the diagnostic interview	80	21	0	1.84	1.81
Instructor or Self-Evaluation: Rate how effective your instructor was in helping you accomplish the goals of this course (your effectiveness as an instructor)	91	6	3	1.54	1.98
Course Components: Rate the effectiveness of each of the following course components in helping you (your students) accomplish the goals of this course.					
1. "Programmed Instruction in Medical Interviewing" films	58	30	11	2.44	3.08
2. Demonstration interview of a patient by group leader	77	17	6	1.97	2.45
3. Student interview of a student role-playing a patient	68	23	9	2.13	2.24
4. Student role-playing a patient being interviewed	55	30	14	2.41	2.20
5. Student interviewing a patient	90	8	2	1.44	1.83
6. Student observing a fellow student interview a patient	81	19	1	1.76	2.33
7. Pre-post exams	30	41	30	3.08	3.00
8. Required text "Medical Interviewing: A Programmed Manual"	46	31	24	2.75	—
General: Rate the interviewing course in general.	90	7	3	1.63	—

reversed. This presented a unique opportunity for the student to be an observer-teacher, thereby enhancing his own learning.

Following each of the required small-group sessions throughout the week, interviewing movies (7) were presented in a large-group setting to enhance the learning of both verbal and nonverbal aspects of patients' responses (attendance optional). Ten programmed interviews, available on videotape and on 16 mm. film,[1] were written to illustrate specific interviewing problems and techniques (8). Professional actors played the roles of patient and physician. At certain nodal points the student chose among three alternate physician responses rather than constructing his own response. This format allowed the student to become actively involved with the more complete verbal and nonverbal responses of the physician and replies of the patient. The film narrator's commentary about each type of response added to the student's understanding of the process. The films were supplemented by class discussion following the completion of each.

A posttest, consisting of showing the two pretest films, was administered in the large-group setting during the final required hour of the course. The student was given his pretest and posttest scores and the class average so that he could further assess his learning gain.

COURSE ASSESSMENT

In order to assess the educational value of this course, an extensive evaluation was conducted. The students (N = 233) were asked to rate their own and the instructors (N = 21) were asked to rate the students' accomplishment of the course goals, effectiveness of the course components in accomplishing these goals, instructor effectiveness (for the instructors this was a self-evaluation), and the overall value of the course. The following rating

[1] The ten interviewing films and two test films are available on request from the National Medical Audio-Visual Center (Annex), Station K, National Institutes of Health, Atlanta, Ga. 30324.

schedule was used: 1 = excellent, 2 = above average, 3 = average, 4 = below average, and 5 = poor. Of the group, 216 students (92 percent) and 21 course instructors (100 percent) responded to the questionnaire. Cognitive learning gain was evaluated by pre- and posttest comparisons.

The group leaders consisted of four staff psychiatrists, three staff psychologists, ten psychiatric residents (who had completed their first year of training), two staff physicians from the department of family practice and community health, and two staff social workers. Seven of the 21 group leaders had been instructors in the course the previous year, the first time that it was offered. Most of the 14 remaining group leaders had had no formalized course work in interviewing techniques during their specialty training, although all group leaders were given instructional kits and were invited to attend an instructional seminar before the course began.

RESULTS

Of the students, 77 percent had had no previous training in interviewing techniques; 14 percent had had some training in an elective course offered the previous quarter; and 9 percent had had previous training with other groups. None of the students had had previous experience conducting medical interviews with patients. Eighty-five percent of the class attended all required and optional sessions of the course.

Table 1 shows the distribution of ratings (scores 1–5) and mean ratings obtained from the student and instructor evaluations.

Students rated the course between "above average" and "excellent" (mean rating = 1.63). In rating their accomplishment of each course goal, the students assigned the highest mean rating (1.69) to goal 3—"to encourage the interviewer to limit his own activity and encourage activity on the part of the patient." The course component that the students found most effective in learning interviewing techniques was their interviewing a hospitalized patient (mean rating = 1.44). The instructors felt that, of the course goals, goal 1 was best obtained by the students: "to increase the student's attention to process information." This goal was rated third highest by the students. The course component ranked highest by *both* students and instructors was "student interviewing a patient"; this and the subsequent small-group discussion were apparently the most important elements in teaching and learning interviewing techniques.

Comments by the students included: "Excellent course." "Need to interview more real patients." "Course should be longer with periodic follow-up." "Our small-group experience was excellent." "More case history role playing." "Most valuable part of my experience was self-evaluation tempered by fellow students' empathy and critiques." "Feel that a videotape interview and playback should be required for all students."

Regarding the social work instructors: "Destroyed my own distrust of social workers." "She suffered typical medical student wrath for a non-M.D.—handled it very well."

About the text: "Not worth buying, especially for $5, not worth it." "Good." "No good." "Bad book."

About the films: "Somewhat of a comedy." "One or two films sufficient." "Went to sleep; yes, I went to bed the night before."

The course in general: "A very excellent experience."

Comments by the instructors included: "Good to let students interview their fellow students, role-playing a patient first, which helps them to get the feel of interviewing while under minimal stress." "It was a rewarding experience to teach the course."

TABLE 2

Mean Number Correct and Mean Weighted Scores for Second-Year Medical Students (N = 207)

Item	Pretest	Posttest	Level of Significance
Film 11 (Mr. King)			
Number correct*	6.04	7.97	$p<.001$
Weighted score**	13.09	16.29	$p<.001$
Film 12 (Mr. Lloyd)			
Number correct*	4.86	7.09	$p<.001$
Weighted score**	12.61	15.66	$p<.001$

*Maximum number correct = 9.00.
**Maximum weighted score = 18.00.

LEARNING GAIN

Cognitive learning of interviewing skills was assessed by two test films designed by Adler and associates (8); both films were administered before and after the course. Each film contained nine nodal or decision points. At each nodal point, an interview situation was portrayed, followed by three alternative physician responses. The student had to decide which alternative was appropriate and record this on his answer sheet. The nodal points within and between films were designed to be independent of one another; therefore, a student's answer at one point should not influence his subsequent responses.

In order to control for possible sequence effect, the order of the films was alternated on pre- and posttest. That is, for the pretest, Film 11 (Mr. King) was shown first, followed immediately by Film 12 (Mr. Lloyd); the order was reversed for the posttest.

Complete pre-post data were obtained for 207 students (85 percent); the results are shown in table 2. The mean number correct and mean weighted scores (8, p.16) are given for each film.

On the basis of a matched-pairs t test significant pre-post differences ($p<.001$) were found with each film; these differences were evident regardless of whether number correct or weighted scores was the dependent variable.

In order to examine the extent to which the two films

were parallel, a Pearson correlation coefficient was run with the pretest scores. The correlation (r_{xy} = .34) was the same for number correct and weighted scores.

DISCUSSION

The significant differences between the pre- and posttest scores were interpreted as an indication of significant learning gain attributed to the one-week course.

Weighted scores were derived originally (8) in order to make the two test films parallel. In previous research Adler and associates (8) reported correlations for weighted scores ranging from .49 to .69 for various groups of academic or practicing physicians. Although Adler and associates assessed second-year students at two medical schools (N = 61 and N = 75), their test administration did not include both films; therefore, correlations between the films were not available. The results of the current study do not offer strong support for the assumption that use of the two films will provide parallel results for sophomore medical students; therefore, the use of one film as a pretest and the other as a posttest cannot be strongly justified for second-year students.

A major consideration in presenting this course was faculty time required to teach interviewing skills. Excluding preparation, the 21 instructors each spent ten hours teaching during one week, for a total of 210 teaching hours for the class of 233 students. The course director spent six hours presenting the films, discussing them, and administering the pre- and posttests. He spent additional time organizing the course, scheduling, recruiting group leaders and patients, and obtaining tape recorders, as well as supervising the course presentation.

Presenting the course in a one-week time block facilitated maximum participation by the group leaders. Interest, morale, and enthusiasm were more easily maintained than if the course had been spread over several weeks. It is important, however, to reinforce the concepts presented in the course at periodic intervals throughout the medical students' training. However, Ware and associates (9) have shown that learning gain persists six weeks after the presentation of the programmed instruction films (7) over a previous ten-week period.

Videotaping student interviews and playing them back appears to be a valuable teaching adjunct (1), although Adler and associates (4) reported that "Programmed Instruction in Medical Interviewing" films (7) were superior to videotaped interviews and discussion in producing certain behavioral changes that were measured by the Psychotherapy Interactional (PIA) Scale (10). We are currently studying the value of including the videotape learning experience. Initial problems for large medical school classes are the availability of equipment and technicians to operate the equipment, and scheduling instructors, students, patients, and/or a programmed patient. Logistical problems are pronounced.

Using a professionally trained programmed patient has value in that the "patient" is available for comments during the review session, clarifying interpretations of the student's response or why he replied as he did to a specific inquiry. However, this duplicates somewhat our practice of having a fellow student role-play the patient. Since the student patients can quickly be taught to provide feedback to their colleagues and since using student patients greatly reduces logistical problems, this approach seems to be the most expedient.

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Teaching Communication Skills in Medical School

BY JOHN WALDRON, M.D.

The author describes a method for teaching a communication skill (interviewing) to medical undergraduates. In addition to the use of closed-circuit television, feedback from instructors and peers was encouraged. The author outlines students' reactions to this technique and discusses conclusions drawn from four years of using it.

THE FOLLOWING PAPER PRESENTS a description and discussion of four years' experience in developing methods for teaching communication skills to medical students in the department of psychiatry at Queen's Medical School in Kingston, Ontario.

First, it seems appropriate to comment on definitions. A number of professions have acquired skill in communications in order to conduct work properly. In several of these professions (e.g., journalism and television) the ability to communicate often implies the capacity to transmit information accurately. In recent years such skills have been emphasized in some programs involving aspects of preventive medicine (1). However, in the medical and helping professions, communication generally is, or should be, given its full meaning as an *exchange of information* between two or more people. It is consequently at the heart of the patient-doctor relationship and is emphasized as such in curricula devoted to this area.

In its best recognized form communication entails the capacity to listen to the patient, not in a passive manner but while employing judiciously spaced and phrased questions and indications of encouragement and understanding designed to elicit a valid account of the patient's troubles. This describes the medical interview or perhaps more precisely the diagnostic medical interview.

In the past a great deal of confusion has been generated by the different uses of the terms "interview" and "history taking." We have discussed some of these problems elsewhere (2). Most of the work with medical undergraduates at Queen's University has been predicated on the view that there is no essential difference between these procedures (3). We particularly do not feel that interviewing should be identified as a psychiatric skill to be taught only by psychiatrists but, rather, that all clinical teachers should recognize as their responsibility the demonstration of proper interviewing or communications skills in the service of eliciting a proper history from the patient.

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The author wishes to thank Ms. Beverley Lazier and the staff at Queen's Closed-Circuit Television for their assistance and encouragement.

DESCRIETION OF TECHNIQUE

The principal component assisting our method over the last four years has been closed-circuit television, a technique described by several other workers (4, 5). The facilities available to us, which were quite sophisticated, were located in the university's television center. We later demonstrated that our techniques did not suffer when we used modest portable equipment.

Though employing elaborate equipment at times, we have at no time employed any kind of disguise. We had earlier resolved that a vital ingredient in the doctor-patient encounter was honesty, and we were therefore not inclined to give the lie to our stated principle by staging a "let's-play-doctor" game. The exercise was conducted for what it was—a medical student learning his job by conducting an interview with the patient, who was fully aware of all the circumstances, including the clearly visible equipment (see figure 1).

The details of our technique follow:

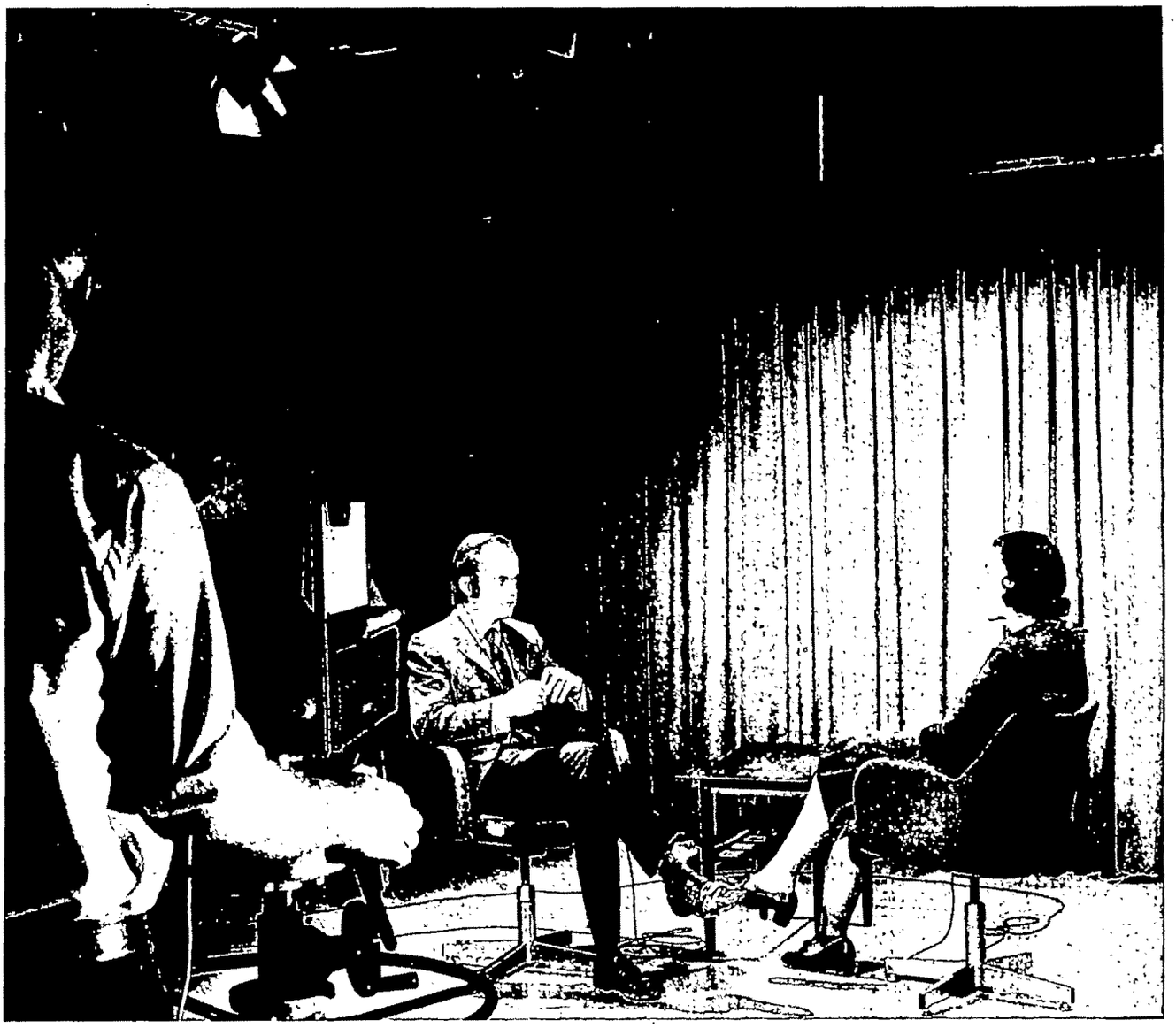
1. The students, who undertake this course in their third year of medical school, have already witnessed demonstrations of interviewing styles in their second year. They have also been given specially prepared handouts designed to inform them about some of the basic maneuvers in talking with patients.

2. The students rotate through psychiatry for eight weeks, during which time they meet once a week in small groups of three or four participants to study interviewing techniques. Each student is given two opportunities to conduct a 40-minute diagnostic interview with a patient. He is instructed to do this so that by the end of the interview he is in a position to make a tentative diagnosis, discuss the prognosis, and report on the patient's mental status.

3. This interview is videotaped, as described previously, and at the same time monitored by the tutor and the remaining two or three peers in the student group. During the recording, the tutor uses the student's ongoing performance to teach the other group members and makes notes on the performance. Instead of referring to a specific incident during the interview, the tutor jots down for easy reference the corresponding numbers appearing in the lower right-hand corner of the screen (see figure 2).

4. Following completion of the interview, the student rejoins the group. When it is deemed suitable, the tutor

FIGURE 1*
Student Interviewing Patient



*Those appearing in the photographs are models.

may ask the patient to join the first part of the discussion to give his impressions of the student's performance. Maximum use is made of peer teaching, with the tutor joining in the discussion and making free use of videotape playback and the screen counter for accurate pinpointing.

5. After the group discussion has ended, the student-interviewer sets up an appointment with the television studio to view his performance either alone or with his group members during their independent study time. To help him, the tutor composes a written critique of the interview, again using the screen counter so the student can coordinate given incidents with the comments.

6. For a number of years we have been attempting to develop an interview rating scale with which we would pass on to the students, in as succinct a way as possible, relevant and valid information concerning their performance. Preliminary work on this scale is encouraging (2), and while we are using it at the moment as a research instrument, we hope to experiment with it as a teaching/learning device shortly.

RESULTS

While we have been developing methods, we have also been attempting to develop instruments and criteria (2).

FIGURE 2
Video Picture of Patient and Screen Counter



We do not at this time have measurements of the effectiveness of the method using our rating scales, but the course has stood up well in what we consider the most rigorous test of any educational method—the constant and enthusiastic reception from the students involved. The only consistent criticism the students have offered is that such teaching methods should be employed in the first year of the curriculum rather than in the third.

DISCUSSION

We have made a number of conclusions as a result of our experience with this course over the last four years.

The first and most obvious is that skills of this kind not only should be but can be taught at the earliest possible time in medical school. In this we agree with the students. There is little to support the classical contention that before one commences to learn these skills one must first have acquired a considerable amount of knowledge from lengthy lectures given by the teacher. We feel that we can safely assume that most medical students bring to school sufficient knowledge and skill in the area of communication to permit the commencement of teaching in this area very early in medical school.

Second, we have concluded that complete honesty in the student-patient encounter is necessary. As we anticipated, the openness of our techniques and the absence of disguises generated, with few exceptions, what we felt was a genuine existential encounter that was of value to both the patient and the doctor. We feel that this is an important observation in view of the hesitancy of many teachers and students to become involved in what they see as an artificial and theatrical procedure.

The third observation, and one that is well-documented in the literature (6), is that the experience of viewing oneself in replay is probably the single most important learning experience for the student. Students have repeatedly told us that the tutors' written and spoken comments were hardly necessary to point up their errors since they were painfully evident when viewed on the television screen.

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Evaluation of the SAID Teaching Program

BY DAVID W. CLINE, M.D., AND JUDITH N. GARRARD, PH.D.

Evaluation of a new teaching program suggests that second-year medical students can be taught psychiatry with a multimedia combination of filmed interviews with patients, an inventory of critical symptoms, a diagnostic chart illustrating clustering of symptoms for basic diagnosis, and rapid feedback of faculty evaluation. When compared with controls, experimental subjects did significantly better in evaluating filmed patients, but there was only a trend that they did better when evaluating psychiatric patients at the bedside. The students rated this program as an effective teaching approach.

MILLER AND TUPIN (1) have recently published a description of the System Analysis Index for Diagnosis (SAID), which is a method to teach clinical psychopathology to second-year medical students and other mental health professionals. The SAID system is a multimedia teaching device that emphasizes student participation in a structured psychiatric patient evaluation with rapid feedback of faculty evaluation to enhance consensual validation of student with student and of student with professional.

The system operates as follows: The student group observes a film or videotape of a physician interviewing a psychiatric patient. Each student then makes decisions as to the absence or intensity of 40 psychiatric symptoms that are listed and defined in the *SAID Handbook* (2). With the use of a diagnostic flow chart, he is directed to pool the symptoms recognized to construct a likely psychiatric diagnosis. For example, the student would have had to evaluate the psychiatric patient as having a mild degree of impaired intellectual capacity, disorientation-memory loss, and disordered attention-consciousness in order to make a likely diagnosis of nonpsychotic organic brain syndrome. For the diagnosis of psychotic brain syndrome, he would have had to observe, in addition, the moderate presence of delusions, hallucinations, illusions, or suspiciousness.

Upon completion of his evaluation the student is given the collective faculty evaluation of the patient, including symptom absence or intensity, diagnosis, and the evidence for each of the ratings, i.e., for marked disorientation, "Patient did not remember date, day of the week, or where he was presently residing." After each videotaped exercise there is a discussion of the nature of psychopathology observed, followed by a lecture on that particular psychiatric disorder.

The student evaluation, which is marked on a computerized answer sheet, is rapidly scored and returned to him with a print-out of how his evaluation compared with that by fellow students and by the faculty. As he proceeds through the program and evaluates more patients, he can trace the changes in his clinical judgment.

The teaching strategy is to maintain optimal interest level and active involvement arousal through the use of individual participation in a simulated situation and rapid feedback.

The purpose of this research is to investigate the efficacy of this teaching method. The hypotheses are as follows. Students taught with the SAID method do better than controls in:

1. Learning skills in psychiatric symptom recognition.
2. Learning skills in assessing intensity of psychiatric symptoms.
3. Learning to make psychiatric diagnoses by pooling symptom clusters.
4. Learning content about the psychiatric disorders.

Finally, do students appraise this method of teaching differently than other methods of teaching?

METHOD

At the University of Minnesota Medical School the second-year medical students (N=230) were taught a course in clinical psychopathology during a two-week, 45-hour block of instruction in March 1972.

The major objectives of this course were to teach the students and expect them to learn: 1) about the psychiatric disorders (brain dysfunction, functional psychosis, personality disorder, neurosis, special symptomatic syndromes, and behavioral disorders of childhood and adolescence), 2) about psychiatric symptom recognition, 3) to accurately evaluate intensity of psychiatric symptoms, 4) to organize psychiatric symptom clusters together to make a psychiatric diagnosis, 5) about psychiatric treatments, and 6) about mental health treatment resources.

The methods of teaching involved multimedia team teaching, as described in the SAID method above. Table 1 describes the time distribution of the instruction period.

Read at a panel at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1-5, 1972.

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The work for the statistical analyses was supported by Health Professions Special Project Grant Program grant ME-00109 from the National Institutes of Health.

TABLE 1
Topic Hour Distribution

Topic	Hours
Classroom	
Overview and mental health treatment resources	2
Problems of childhood and adolescence	9
Organic brain syndromes	4
Schizophrenia	3
Affective disorders	4
Neurosis	3
Suicide	1
Drug and alcohol abuse	5
Personality disorders	2
Total classroom hours*	33
Tutorial	8
Precourse and postcourse tests and feedback	4
Total	45

*SAID videotapes with feedback discussion accounted for ten of these hours.

In addition to the SAID system, each student was required to evaluate a psychiatric patient in a real-life setting under the tutelage of a faculty psychiatrist. The purpose of the tutorial was that the student: 1) recognize the nature and intensity of the psychiatric symptoms presented by the patient, 2) organize symptom clusters together to make psychiatric diagnoses, and 3) suggest possibilities for treatment for the patient. The tutorial was conducted near the end of the 45-hour block of instruction, after the SAID films and lectures were completed.

STUDY SAMPLE

Sixty students were randomly selected from the 230 members of the second-year (phase B) medical school class and assigned to either an experimental (E) or control (C) group. Students in the C group (N=30) were asked not to attend the SAID videotape-feedback-discussion sessions (ten hours of the course) and instead to use the time for independent study. Otherwise, they were to attend the lectures, the live patient demonstration, the tutorial, and the precourse and postcourse examinations. Students in the E group (N=30) were asked to attend all of the course's core presentations described above.

MEASUREMENT INSTRUMENTS

During the first and last hours of the course, a two-part examination was given. Part 1 was a ten-minute videotape showing a physician interview with a patient who had a psychiatric disorder. The students were asked to list the psychiatric symptoms they observed, the psychiatric diagnoses, and then collate the symptoms with each diagnosis. Part 2 was a true-false examination consisting of 78 questions about the psychiatric disorders. Although the pretest and posttest were of the same format, they contained different patients and questions. Both tests were designed by Paul R. Miller (2).

A second method of assessment was by tutor ratings. Prior to the beginning of the course, each tutor was assigned one student from each group (E and C). All tutors (N=30) participating in this study were members of the psychiatry department. They were not told of the difference between E and C students.

During the tutorial, each student evaluated a different psychiatric patient and reported his findings to the tutor. Using a standard rating form, tutors rated students on the basis of: 1) recognition of different kinds of psychiatric symptoms, 2) correct identification of intensity of symptoms, 3) correct diagnosis, 4) knowledge of appropriate treatment, and 5) general performance. A rating scale of 0 (poor) to 100 (excellent) was used with the first three areas rated, and a scale of 1 (excellent) to 5 (poor) was used with the last two areas.

A final measure was a student evaluation of the course. This consisted of a questionnaire asking the students to rate the various components of the course results.

RESULTS

Tables 2–4 show the results of the precourse and postcourse examinations for groups E and C, the results of the tutor evaluation of E and C subjects, and the results of the student evaluation.

Do students taught with the SAID method do better than controls in:

1. Learning skills in psychiatric symptom recognition?

TABLE 2
Pretest and Posttest Scores Comparing Groups E and C

Item	Group	Number*	Pretest Mean	Posttest Mean	Value of T	Level of Significance
Filmed patient evaluation	E	28	13.0±2.5	17.1±2.8	4.550	p<.001
	C	28	13.0±2.6	14.0±2.6	.015	n.s.
True-false examination	E	17	46.2±5.0	59.1±4.0	3.002	p<.001
	C	20	51.3±3.7	59.5±4.6	2.053	p<.01

*Number varies depending on students' completion of both pretest and posttest and proper identification of test answer sheets.

TABLE 3
Tutor Evaluation of Group E and C Subjects (N=20 Pairs)*

Item	Group E Mean	Group C Mean	Value of T	Level of Significance
1. Recognition of the different kinds of psychiatric symptoms**	65.5 ±15.4	63.5 ±21.6	.3393	n.s.
2. Correct identification of the intensity of psychiatric symptoms**	67.7 ±14.5	62.5 ±18.3	1.0995	n.s.
3. Correct diagnosis of the patient's problems**	56.0 ±20.7	67.5 ±19.4	.2360	n.s.
4. Knowledge of appropriate treatment***	2.55± 0.69	2.85± 0.81	- .4204	n.s.
5. Student's general performance***	2.25± 0.72	2.55± 0.94	1.1132	n.s.

*Of the 30 pairs of subjects, ten were eliminated because one of the members did not go to the tutorial, did not go to the first tutorial, or had previously had significantly more structured psychiatric training than his partner.
**Based on a scale of 0 to 100, with 100 as the best score.
***Based on a scale of 1 to 5, with 1 as the best score.

Results from table 2 show that on the pretest and posttest, students in group E had a statistically significant learning gain in recognizing psychiatric symptoms that they saw in filmed psychiatric patients, whereas group C students did not. However, the difference was less clear as judged by the tutors (see table 3, number 1). When real patients were used, E tended to do better, but the difference between E and C did not achieve statistical significance.

2. Learning skills in assessing intensity of psychiatric symptoms?

The results of the tutor evaluations showed a tendency for group E to assess intensity of symptoms better than group C, although the difference did not achieve statistical significance (see table 3, number 2).

3. Learning to make psychiatric diagnosis by pooling symptom clusters?

Results of the precourse and postcourse examinations indicated that group E was better able to pool symptom clusters and make psychiatric diagnoses than was group C. However, when groups E and C evaluated psychiatric patients on the ward there was no statistical difference, although group E tended to do better (see table 3, number 3).

4. Learning content of psychiatric disorder?

Both group E and group C made statistically significant learning gains regarding content material as shown by the precourse and postcourse true-false examination

TABLE 4
Student Evaluation of the Course (N=230)

Item	Ratings, in Percentages: Excellent or Above Average (1–2)	Average (3)	Below Average or Poor (4–5)	Did Not Attend (Percentage)	Average Rating
1. Overall rating. In general, how would you rate (1–5) this phase B course?	58	35	7	0	2.39
2. How intellectually stimulating was this course for you?	61	31	7	0	2.34
3. Course objectives. Rate (1–5) the extent to which *you* feel you accomplished these course objectives:					
To learn about psychiatric disorders	55	38	8	0	2.45
To recognize psychiatric symptoms	72	24	5	0	2.13
To organize psychiatric symptom clusters together to make a psychiatric diagnosis	44	44	11	0	2.60
To learn about psychiatric treatments	31	50	21	0	2.88
To learn about mental health treatment resources	14	55	31	0	3.18
4. SAID system. Rate the effectiveness of the SAID system as a method of learning symptom recognition and diagnosis in this course.	74	19	7	14	2.10
5. Lecture evaluation. Mean rating for 12 lectures.	50	35	16	6	2.54
6. Tutorial. How would you rate (1–5) your tutorials as a *learning experience* in this course?	88	8	3	3	1.59
7. Optional activities. Rate (1–5) each of the optional activities as a *learning experience*.					
Field trip to St. Peter State Hospital	39	41	21	67	2.70
Electroshock therapy demonstration	74	25	1	45	2.01
Psychiatry and the theater	82	13	5	45	1.79

(table 2). This portion of the course was taught by didactic lecture and live case presentation that all students, both E and C, attended.

Do students appraise the SAID method of teaching differently than other methods of teaching?

The SAID system was rated as above average or excellent by 74 percent of the class (table 4). The effectiveness of the lecturers, in combination with a few live case demonstrations, was rated by 50 percent of the class as above average or excellent. The average rating for these lecture presentations was 2.54 (between average and above average), compared with 2.10 (above average) for the SAID system. However, the tutorial experience was rated highest of the learning experiences, i.e., 88 percent rated it as above average or excellent, with a mean rating of 1.59 (between excellent and above average). General comments about the SAID system were, "This was very helpful." "Excellent definition of terms, but too easy to pigeonhole patients." "Liked it a lot." "Great for symptoms, still have trouble with diagnosis." "I did not like adding up numbers to arrive at a diagnosis. Seemed too simplistic to me."

DISCUSSION

The most striking finding in this study are those results which compare subjects' ability to evaluate filmed patients with their ability to evaluate real-life psychiatric patients. Although group E students were able to recognize symptoms and diagnose filmed patients significantly better than group C students, there was only a trend in that direction when they evaluated live patients.

On the basis of these results, the question becomes: What was lacking in the SAID system that did not produce significantly different results in the face-to-face evaluation? E and C students were given patients to evaluate in their first tutorial experience so that if there were differences in their clinical abilities it could be clearly shown at that time, rather than at a later tutorial experience. We could postulate that the real patient experience is so different from the classroom experience that knowledge gained from the classroom experience is not immediately transferable to the bedside. In the bedside setting the student is participating with the patient, and not only do interview techniques become important, but the art of personally eliciting psychiatric symptoms becomes important, a task not specifically addressed in the SAID system.

Miller has revised the *SAID Handbook* (2) and the SAID patient presentations on film so that a clearer model is presented to aid the student in recognizing psychopathological symptoms. For example, in the revised edition, under each symptom listed in the handbook specific questions and observations are listed, which are useful in determining the presence and intensity of the symptom. When patients are presented on film, note is made on the film of which area of inquiry is being investigated, e.g., under disorientation-memory loss, there are questions such as, "What day is it?" "How old are you?" "Where are you now?"

Another important feature of this study reveals that the SAID system is well accepted as an effective teaching tool by the students. It was easily taught to a class of 230 students. The multimedia SAID teaching system is consistent with the new trends in medical education: Its content is core curriculum, it is patient-centered, and it prepares the student directly for subsequent clinical experience. It incorporates the application of learning theory by making the student an active participant in his learning, giving him immediate frequent feedback as to how he compared with his peers and teachers. This is a major step in enhancing the teaching of psychiatry in the medical school curriculum.

Although the students rated the SAID approach better than lecture-live patient demonstration but not as good as the tutorial experience, it is important to note that a variety of teaching approaches are useful in facilitating students' learning.

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EDITORIAL

Psychiatry in Undergraduate Medical Education

AMERICAN MEDICINE is in a period of change. After the publication of the Flexner report, medicine added the scientific tradition to its core identification with the role of physician and healer. As a result we have expanded our health capabilities with the elaboration of new technologies for the investigation and treatment of disease. Today medicine is being pressed to add a commitment to social change to the established roles of healer and scientist. We are struggling to assimilate the technology of health while facing the issues of health care delivery, financing of health services, citizen participation in health planning, and organization or coordination of health with other social and welfare services.

In the last three-quarters of a century the scientific study of personality has generated a theoretical and clinical dynamic psychiatry. The adaptation of the individual to states of health and illness is subject to investigation, understanding, and modification. But unfortunately the elaboration of psychiatry as a specialty has not brought modern scientific psychiatry any closer to general medicine. This is reflected in the traditional curricula for medical students. Psychiatry is presented as a series of separate courses and clerkships. The prospective physician rarely sees the psychiatrist on medical, surgical, pediatric, or other inpatient and outpatient services.

The strength of the identification as a healer, the contributions of scientific medicine, and the social benefits achieved by specialization have stabilized American medicine for more than 50 years. That stability is now threatened by forces operating within the system itself and by social discontent about the gains that have been realized when they are compared with the benefits that were expected.

Where psychiatry goes in relation to general medicine will be strongly influenced by the direction general medicine takes. General medicine is undecided about the balance between scientific technology and humanism, or between patient care and social action. Psychiatry will more constructively influence the coming social evolution of medicine if the gap between general medicine and psychiatry is closed. Each of the other options available to psychiatry has serious flaws. The traditional position of psychoanalysis is too isolated from the bulk of medicine to influence nonpsychiatric physicians. The community mental health movement substitutes consultation for direct patient contact, social action for psychological insight, and brief, economical treatment for intensive, curative insight therapy. It neglects the individual for the greater social good and thereby departs from the bedside tradition of clinical medicine. Bio-

In this section, the Editor samples varied opinions on topical problems. The opinions expressed herein are not necessarily those of the Editor, nor can they in any way be construed as marking the official policy of the Journal.

logical psychiatry uses models that are too linear to permit the practitioner to integrate the physical and psychosocial aspects of man.

If psychiatry is to live up to its capacity for instilling humanistic values in the physician—to prepare him for empathy, rapport, and sensitivity with patients and to integrate the physical and psychosocial studies of man—then it must work with the emerging physician. It must speak to the physician in terms he can understand by offering a humanistic, interhuman perspective on patients as a complement to the technological preoccupations of our modern scientific medicine. This issue of the *Journal* carries a number of papers that report new means for educating nonpsychiatric physicians. What is important is the emphasis on the training of the undergraduate medical student. The techniques for teaching the medical student may change or be replaced. The focus of psychiatry on its interface with medicine is basic to addressing the crises of identity, confidence, and direction in the general physician and in the psychiatrist and to defining the relationship of psychiatry to society at large.

ROBERT E. BECKER, M.D.

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BRIEF COMMUNICATIONS

Amnesia and Competency To Stand Trial

BY DENNIS KOSON, M.D., AND AMES ROBEY, M.D.

In case law, defendants suffering solely from amnesia who are otherwise competent to stand trial are generally found to be competent. However, temporary, treatable amnesia may warrant a finding of incompetency. The authors review current concepts of amnesia. They stress the need for the psychiatrist to understand the nature of amnesia so that he may assist the court in its adjudication of competency to stand trial.

WHEN A CRIME OCCURS the courts are committed to bringing the accused to justice as quickly as possible. Justice includes preserving the defendant's constitutional rights, particularly the right to confrontation by his accusers, to consultation with counsel, and to due process in general (1).

The legal concept of competency to stand trial has received considerable attention recently as a result of increasing concern for these constitutional rights. This concept developed, first in common law, then in statutory law, as an extension of the prohibition against trial in absentia. A defendant should be present at his trial not only physically, but mentally as well (2). Most statutes, having codified long-standing common law tests for competency to stand trial, look to the defendant's *present* mental condition to determine whether he has the capacity to understand the nature and object of the proceedings against him, to understand his own position in reference to those proceedings, and to assist counsel in the preparation of his defense in a reasonable and rational manner (3, 4).

The courts face a special problem with respect to trial competency when a defendant claims amnesia for the events of an alleged crime. This problem concerns the amnesic defendant's ability to cooperate with counsel rationally and reasonably. The amnesiac, by virtue of his inability to recall his own whereabouts, the circumstances of the alleged crime, or other events leading up to it, at least theoretically renders himself unable to be of assistance to counsel in the preparation of his defense. If the defendant can neither inform his lawyer of the actual circumstances nor recognize or challenge false or misleading evidence detrimental to his case, should he be found incompetent to stand trial?

To assist the court in making an appropriate determination, the psychiatrist should examine several aspects of the memory defect. Is the inability to remember real or feigned? If it is real, what is its cause? Is it temporary or permanent? If it is temporary, is it treatable? Is it crucial to his case (on psychiatric grounds) that the defendant be able to remember?

A review of case law indicates that defendants suffering solely from amnesia who are otherwise competent to stand trial generally are adjudicated competent. In *State v. McClendon* (5) and *Commonwealth ex rel Cummins v. Price* (6), for example, appellate courts found that the defendants, who were suffering from traumatic amnesia, were competent to stand trial; it was stated that amnesia does not totally incapacitate defense and that the defendant is free to assist counsel in a number of other ways. Nevertheless, in many states there is the suggestion in case law that *temporary, treatable* amnesia may warrant a finding of incompetency (7).

There is ample authority to the effect that competency to stand trial generally includes the faculty of memory (3, 8–11). If this were consistently held, however, any amnesic defendant would have to be found incompetent. Many have not been so adjudicated, and appellate decisions, which clearly distinguish between *temporary* and *permanent* amnesia, seem to be made on the practical basis that an adjudication of a *permanently* amnesic defendant as incompetent precludes forever the possibility of his returning to trial.

As an alternative to an adjudication of incompetency to stand trial, several courts have ruled that defendants suffering from treatable, temporary amnesia should be granted a continuance "to employ such expert assistance,

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

At the time this work was done, the authors were both with the Center for Forensic Psychiatry, Ann Arbor, Mich., where Dr. Robey is Director; Dr. Koson is currently a resident in psychiatry, University of Pennsylvania, Philadelphia, Pa. Address reprint requests to Dr. Koson, 236 West Albemarle, Lansdowne, Pa. 19050.

in addition to counsel, as may be required to induce defendant to remember" (12), particularly in the event that "full possession . . . of independant recollection is really essential to the fairness and accuracy of the trial" (13). This tactic does not demand an adjudication of incompetency with resultant adjournment of the trial and commitment of the defendant to a mental hospital.

Since the courts find the distinction between temporary and permanent amnesia of use, it is appropriate to review current concepts of amnesia—in particular, its diagnosis, course, and treatment.

CURRENT CONCEPTS OF MEMORY AND AMNESIA

Memory, in the simplest form of the process, involves taking in information through our senses (input), storing it (memory formation), and at some future time recalling it on demand (output). Input can consist of outside sights, sounds, smells, etc., such as a picture, a string of words, or the odor of bacon. Once the thing to be remembered gains access to the memory system, the process of memory formation takes place. Such input must go through two steps in order to be remembered: a short-term or temporary stage and a long-term or permanent stage.

Short-term memory is what is used when, for example, a telephone number is remembered for a few seconds while being dialed and then is quickly forgotten. This form of memory storage is easily disturbed by such things as interference or distraction. If someone asks a question, we forget the number and must look it up again. Entry to this stage of memory requires normal perception and attention, that is, events must be perceived correctly and be significant or important enough to warrant focusing attention on them. The input will, if it persists in short-term memory, become fixed or registered and become part of the long-term memory store. These permanent memories can then be recalled at some future time on demand (stimulus), a complex and poorly understood process that depends, among many other things, on normal functioning of the brain.

Amnesia is defined here as the inability to recall events that properly "ought to be" recalled, that is, events that are significant and warrant sufficient attention. For instance, we "ought" to remember our children's names, our own telephone number, a criminal act, etc.; failure to do so constitutes amnesia. If we cannot recall someone else's telephone number, what we had for breakfast last week, or a string of words, we are simply forgetting. To put it another way, amnesia can loosely be considered pathological or unwarranted forgetting. Interference at any stage of the process between input and output may result in amnesia.

Causes and Types of Amnesia

Amnesia may be divided into disorders of memory *formation* and *recall*. Any process that interferes with the formation of a short-term memory or its fixation into long-term memory results in a complete or permanent amnesia, from which no recovery is ever possible. It is convenient to refer to this as a *registration* amnesia. Where the memory is presumed to have been formed and stored permanently, but access to it is somehow prevented, the result is an amnesia that in many cases is temporary and treatable. This may be referred to as a *recall* amnesia. Table 1 lists some of the conditions that may cause amnesia and the stages of the memory process at which they may interfere.

Many conditions can affect both memory formation and recall. For example, alcohol-intoxicated people often have difficulty recalling things from the recent past ("Where did I leave my car?") and at the same time have trouble forming new memories of what is happening ("Where did I get that drink?"). Intoxicants that can interfere with long-term memory formation commonly also include other depressants such as barbiturates and tranquilizers when used to excess. Brain damage, too, may impair both memory formation and recall. The most common forms of brain damage are associated with chronic alcoholism, vascular disease, senility, and trauma. Less commonly encephalitis, tumor, epilepsy, and other types of disease will be seen. While certain mental states such as psychosis, sleep deprivation, and severe depression may so impair perception and attention as to prevent even short-term memory, the most dramatic amnesias result from psychological blocking of normally formed memories. Most notable in hysteria and the affective psychosis, and certainly in other disorders and normal people as well, repression may act to prevent emergence of certain painful or anxiety-provoking memories into consciousness. Of the many conditions listed in table 1, only the repressive amnesias and recall amnesia based on acute, *reversible* brain damage are potentially treatable.

While it is not possible to discuss many causes of functional and organic amnesia, several common examples may serve to illustrate some of the diagnostic problems. In a forensic setting, probably the most frequent causes of amnesia are alcoholic blackouts and head trauma. Courtrooms are filled with defendants who committed crimes while under the influence of alcohol or other depressants. As table 1 shows, intoxication with depressants may act at several stages of memory formation by disturbing attention and short-term memory, as well as by preventing registration of long-term memory (14).

Other aspects of the alcoholic blackout may confuse the diagnostic picture. The amnesia associated with the blackout may take several forms. There may be a complete or en bloc total amnesia, as well as a spotty, vague form that may be resolved with recall exercises (15). In the latter form, spotty amnesias may show a thematic pattern, suggesting repression, and many alcoholics have the type of personality and psychosocial functioning that is consistent with such repressive phenomena. Obviously, an adequate history of the extent of intoxication, the amount of alcohol used, any other drugs involved, the effects of habituation, and a psychological profile should be obtained.

No discussion of amnesia in a criminal defendant is

TABLE 1
Examples of Conditions That Interfere with Memory Formation and Recall

Memory Formation (Permanent Amnesia)			Recall (Temporary Amnesia)	
Short-Term Memory (Perception and Attention)	Long-Term Memory (Registration)	Chronic Irreversible Brain Damage	Acute Reversible Brain Damage	Repression
Psychosis	Intoxication	Alcoholism (Korsakoff's syndrome)	Encephalitis	Hysteria
Depression	Brain damage	Vascular disease	Trauma	Psychosis
Sleep deprivation	Electroconvulsive shock therapy	Senile dementia	Intoxication	
LSD	Epilepsy	Tumor		
Intoxication	Protein-synthesis inhibitors			

complete without discussing cranial trauma—the classic "bump on the head"—whether it is self-inflicted, accidental, or connected with overzealous apprehension by the police. Cranial trauma produces disorders of consciousness and memory, the extent of which is related to the severity of the trauma (16). There are two aspects to the memory disorder: amnesia for events preceding the trauma (retrograde amnesia), based on a disturbance of *recall*, and amnesia for the time after the trauma (anterograde amnesia), based on a disturbance of *memory formation*. Genuine retrograde amnesia does resolve itself to a greater or lesser degree with time and recall exercises, although the final residual of amnesia may vary considerably. This amnestic nidus may relate more to personality factors, pretraumatic attentiveness, and the importance of the events forgotten.

Barbizet (17) has pointed out that during the period of resolution of retrograde amnesia, paramnesias (where a patient confuses one memory for another) and confabulation may appear. To further complicate the situation, thematic lacunae or islands of amnesia may persist after resolution, involving amnesia for a particular topic or situation that for the patient is laden with negative affect. These should be regarded as any other repressive phenomena.

EVALUATION AND TREATMENT

In the examples used, considerable diagnostic skill may be necessary to distinguish between functional and organic, temporary and permanent, genuine and feigned amnesia. In reference to feigning amnesia, conscious simulation or malingering is always a possibility in the population encountered by the courts. An unusual or improbable pattern of amnesia, failure of retrograde amnesia to resolve, and self-serving, patchy amnesia, where the remembered items have no significance or tend to support only the defendant's innocence, all tend to suggest malingering.

Generally, in the evaluation of amnesia a thorough history and physical examination, with special attention to the neurological examination, careful review of the facts surrounding the amnesia, and skillful interviewing techniques, are imperative. When the clinical evaluation fails to reveal evidence of organically based, *permanent* amnesia, whether due to disturbance of memory registration or recall, diagnostic inquiry must be directed to the possibility of repressive amnesia. As Freud demonstrated, anybody can block or "forget," whether he is normal, neurotic, or psychotic. Many crimes are so painful or anxiety provoking that even relatively normal people can block conscious recall of the events. There is usually no need to make a diagnosis of a hysterical or psychotic disorder to explain this phenomenon. In equivocal cases it is sometimes helpful to employ special diagnostic techniques and an interview under hypnosis or sodium amytal[1] as an aid in uncovering or "lifting" repressed memories (18). Considerable caution should be used, however, in interpreting the results of such interviews.

The entire question of treatment is too complex for inclusion in this brief discussion of amnesia. By definition, however, the *permanent registration* amnesias cannot be treated. Amnesia due to repression may be lifted with treatment, which may involve psychotherapy, narcosynthesis, hypnotherapy, or, in many cases, simply the passage of time. The value of treatment for those who have repressed a painful memory is not only to restore the memory so that they may be considered competent to stand trial (for, indeed, they may have already been found competent despite the amnesia), but also for another reason. When there is considerable blocking of events surrounding the commission of a crime, sudden introduction of the repressed material into consciousness during the trial process may precipitate an acute psychotic or depressive decompensation in a patient whose level of adjustment was marginal and may seriously compromise or destroy his competency to stand trial. While this factor is not necessarily determinative, it should certainly be considered by the psychiatrist when formulating his initial opinion concerning competency and the effect of amnesia upon it.

The recovery of acute reversible brain damage (typically within a maximum of a few weeks) will usually allow amnesia associated with the events prior to the disturbance to resolve, as well as any anterograde amnesia that occurred. As indicated earlier, some residual am-

[1] At the Center for Forensic Psychiatry we now use the more rapid acting sodium methohexital (Brevital).

nesia may remain, and narcosynthesis may be useful in determining whether this is basically associated with repression or is more permanent in nature. Recall exercises may also be useful in the treatment of an amnesia; these involve repetitive review of the facts by a therapist, obtaining associations, and assisting the amnesiac in making permanent those memories which can be obtained. It of course can be mentioned that one of the most striking recall exercises is the actual trial itself.

CONCLUSIONS

It is obviously difficult to treat so complex a subject as amnesia in so brief and cavalier a fashion. In the past the courts have largely dealt with the issue on the *practical* basis of ultimate disposition of the case and have tended to adjudicate incompetency (or alternatively, grant a continuance) only where treatment was possible. The need for the psychiatrist to have an understanding of the nature of amnesia is obvious, so that he may appropriately assist the court in its adjudication of competency to stand trial. If the forensic psychiatrist can explain to the court "the nature of the beast," he may significantly increase the value of his opinion to the courts, which are struggling with the problem of the criminal defendant who says, "I don't remember."

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DISCUSSION

L.C. MAGUIGAD, M.D. (Oxon Hill, Md.)—The issue of competency to stand trial can be a special problem to courts, particularly if they are dealing with a defendant who has a clinical problem that may conflict with established or standard court practices. The case of an amnesic defendant is one clinical example. Because of the complex relationship between law and psychiatry, an adequate solution—namely, to simultaneously serve the clinical needs and to conform with the legal requirements of the defendant—may be difficult if not impossible.

Drs. Koson and Robey attempt to bring to our attention the important subject of amnesia and competency to stand trial, which should generate serious concern not only among forensic psychiatrists in particular, but among all psychiatrists. In their paper they suggest that permanent amnesiacs—those who may never be judged as competent for the rest of their lives—may be a problem for eventual optimum disposition. What should the court do when confronted with an amnesic defendant accused of murder who may never be competent for the rest of his life? In the disposition of such cases some questions arise. Should the defendant stay in a mental hospital for the rest of his life? Should he be released to society with or without supervision? Should he be convicted regardless of the circumstances under which he is tried? Should he be found not guilty by reason of insanity? These are indeed serious questions that may serve as a challenge to psychiatry, and they deserve answers that were not pointed out in the authors' paper.

The closest adequate disposition to the problem in the case law is the case of *United States v. Wilson.* In this case the United States Court of Appeals found it necessary to retry the case because the defendant was found to suffer from amnesia of the alleged offense. The court argued that it would not be fair to convict a defendant if his amnesia substantially reduced his ability to assist counsel in his defense. The courts should be guided by the precedence of this appeal decision: that it would not be fair to try a defendant if, because of genuine amnesia, he is substantially handicapped in his ability to effectively participate in his defense.

At this point it is relevant to remind examining psychiatrists that they have a serious responsibility in carefully appraising an amnesic defendant. In my opinion it is not enough to be aware of the clinical causes and mechanisms of amnesia. Because of the serious implications of our opinions with respect to the amnesic defendant, we should try to effect a high level of diagnostic accuracy. In the forensic setting the matter of malingered amnesia may baffle even the astute clinician. I regret that Drs. Koson and Robey did not elaborate more extensively on this subject. There may be more of an element of malingering in the case of an amnesic defendant than we are willing to accept and are able to recognize.

In our clinical assessment, I think it is also relevant to recognize our subjectivity in our clinical contact with the defendant, which was missed in the authors' paper. Our feelings toward the defendant and his alleged offense, our attitudes toward crime in general, our value systems, and unconscious motivations are some of the many factors that can play a significant role in formulating our opinion about a given defendant, particularly in borderline cases or cases involving unclear diagnostic categories, which can create conflict and confusion in forensic psychiatric practice. A diagnostic adjunct such as the sodium amytal interview, which was suggested by the authors, has questionable value, in my opinion. Theoretically it may dissolve the defenses of a susceptible individual or may mobilize repressed conflict that can overwhelm him to a psychotic state, thus compromising our usefulness.

In essence, at the present stage I agree with the authors that we should mobilize all our clinical resources, combining clinical objectivity, sense of integrity, and sound clinical judgment, in our approach to the problem of amnesia. If we can keep in mind that we are clinicians rather than judges with respect to

the defendant who says, "I don't remember," to an alleged offense, our contributions to the courts can go far, not only to bring simple justice to a particular defendant but perhaps also to increase our effectiveness and value to the courts. I congratulate Drs. Koson and Robey for bringing to our attention a serious and complex problem. I hope that the impact of their paper will pave the way toward specific legislative changes that may simplify the problem of amnesia and competency.

Legal Services as a Tool in Treating the Addict

BY JOYCE LOWINSON, M.D., JOHN LANGROD, M.A., AND LEWIS ALPERIN, LL.B.

Since many patients in methadone maintenance treatment programs have legal problems, the authors suggest that such programs employ an attorney to help them. They discuss the attorney's role in allaying patients' anxieties about the legal system, in guiding them through it, and in educating the courts about methadone maintenance programs. They also present data on the kinds of offenses addicts in their program committed in a one-year period.

IT IS WELL KNOWN THAT MOST ADDICTS support their habits through criminal activities (1, 2). Consequently, many have spent time in jail, either in pretrial detention or following conviction. Many go through a continuing cycle of short-term penalties for possessing drugs or for prostitution; some serve long sentences for armed robbery, burglary, or selling drugs. It is not unusual for an addict to have spent at least as much time in jail as in the community.

Although it is currently fashionable to espouse prison reform, our penal system continues to make rehabilitation accidental (3, 4). Recidivism rates are intolerably high for most prisons in the United States—as high as 80 percent (4).

The addicted inmate is even more likely than the nonaddicted offender to return to a life of crime. Every addict who has been behind bars ruefully tells stories of going from jail "straight to the cooker," and thus to the criminal activity that is involved.

Addicts seeking treatment often have legal problems; therefore, most addiction treatment programs provide some form, however rudimentary, of legal services. If there is no attorney on the staff, a staff member or a successful older patient may accompany the defendant to court to intercede on his behalf. Clients arrested after entering treatment risk discharge from the program and are usually given no assistance. To our knowledge, no program except methadone maintenance has published accurate, reliable records of the outcome of legal services or even of the effectiveness of treatment in eliminating further criminality.

Addicts in methadone maintenance treatment programs (MMTPs) have shown a dramatic decrease in criminality as measured by their rate of rearrest (5). All city and state-funded methadone maintenance programs in New York City report data to the evaluation team at the Columbia University School of Public Health. One of these programs, the Albert Einstein College of Medicine-Bronx State Hospital Methadone Maintenance Treatment Program, has collected its own statistics concerning the extent to which its patients encounter legal problems. This paper will describe the legal services provided by the program in an attempt to resolve these difficulties.

THE PROGRAM LAWYER

It is the conviction of the program staff that to initiate treatment only to have it interrupted by imprisonment is both futile and destructive. To exclude applicants with legal problems would mean that 25 percent of those currently in treatment would have been ineligible. Therefore, in order to guarantee continuity of treatment to those facing imprisonment, the program employs an attorney on a consultant basis to represent them in court. Although it has not been documented, clinical observation strongly suggests that patients respond better to treat-

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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The Albert Einstein College of Medicine-Bronx State Hospital Methadone Maintenance Treatment Program is funded by the New York State Narcotics Addiction Control Commission.

The authors wish to thank Charlotte Levine, Rae Matalon, and Katharine Valdés, Department of Research, for their assistance in the preparation of this paper.

TABLE 1
Distribution by Category and Disposition of 86 Offenses Committed by 64 Patients Arrested While in the MMTP

Offense	Convictions		Dismissals and Acquittals		Discharged from Program Prior to Disposition		Total	
	Number of Cases	Percentage of Total Charges	Number of Cases	Percentage of Total Charges	Number of Cases	Percentage of Total Charges	Number of Cases	Percentage of Total Charges
Narcotics-related	17	19.8	12	13.9	4	4.7	33	38.4
Crimes against property	10	11.6	12	14.0	7	8.1	29	33.7
Violent crimes	6	6.9	6	6.9	3	3.5	15	17.4
Minor offenses	6	6.9	2	2.4	1	1.2	9	10.5
Total	39	45.2	32	37.2	15	17.5	86	100.0

ment when legal problems and concomitant anxieties are resolved. Psychotherapists should take these reality problems into consideration when dealing with addicts.

Despite public awareness of the value of addiction treatment programs, misconceptions regarding methadone maintenance still exist in many courts. Publications by such persons involved in the judicial process as jurists, attorneys, and probation officers have contributed to the acceptance of MMTPs, although much remains to be done (6–8). Too often lawyers who represent addicts are unfamiliar with methadone maintenance treatment. A program providing legal representation must make certain that its attorney is fully aware of the program's philosophy, methods, and results.

In the past the philosophy of the criminal courts has been to "get the addict off the street." As a result, when addicts appear in court, they are afraid of being remanded. Representation by a lawyer connected with their treatment program relieves their anxiety. In addition, a patient who has a lawyer he trusts is more apt to be truthful with him and consequently with the court.

A staff attorney frees counselors from the necessity of frequent court appearances, thus allowing them to work more intensively with their patients. The lawyer, by submitting monthly legal reports that detail pending cases, new arrests, and evaluation of past cases, assists in monitoring and evaluating the extent and nature of criminality among the patients.

THE STUDY

We examined the records of 1,026 patients, all of whom were in the methadone maintenance program at any time during the 12-month period between April 1, 1970, and March 31, 1971. Of the 599 patients admitted during this period, a total of 150 (25 percent) had court cases pending. Most of their arrests involved charges related to possession of narcotics and to larcenies committed to support addiction. Convictions in these cases would ordinarily result in prison terms for the defendants; however, defendants in the program who are represented by the program attorney are rarely imprisoned.

If the patient is likely to be found guilty, the lawyer seeks to obtain a reduced sentence by having him plead guilty to a lesser charge that will result in more lenient treatment by the court. The presiding judge is informed of the defendant's treatment in the methadone program, and a letter written by a program counselor describing the defendant's progress is submitted to the court. The judge may sentence the patient to a conditional discharge, which is, in effect, a suspended sentence. In other instances, the judge will adjourn the case and request additional progress reports. The court expects continuation in treatment; while the defendant who receives a conditional discharge is free of any obligation to the court, the defendant whose case is adjourned is under further legal obligation and must report to the probation department where presentence reports are prepared for presentation to the court. Most reports are favorable, reflecting the fact that the defendant is in treatment.

Occasional difficulties have been encountered; for instance, the investigating officer may not look farther than the defendant's record prior to treatment, or he may feel that a patient who has failed in a drug-free program is likely to fail on methadone. In cases like these it is the lawyer's role to convince the court of the effectiveness of the MMTP. Despite some difficulties, of the 150 cases handled during the 12-month period, no methadone patient charged with a misdemeanor committed before his entry to the program was sentenced to prison.

Patients entering the program who have been charged with a felony require additional effort. For example, a defendant charged with armed robbery is more likely to be imprisoned than a misdemeanant even though he is in treatment. During 1970, however, only two felony cases drew jail sentences. The first, not handled by the program's attorney, resulted in a one-year sentence because a shooting was involved. The second patient was tried in federal court, and sentenced for violation of probation because his rehabilitation was unsuccessful. All other felony cases resulted in favorable dispositions. Indeed, notable successes have been achieved with patients having lengthy prior records.

It is not uncommon for a patient entering the program to have a bench warrant issued when he failed to appear in court following release on bail or on recognizance. Since there are nearly 80,000 outstanding bench warrants

TABLE 2
Distribution by Category and Disposition of 86 Charges Against 64 Patients Arrested While in the MMTP

Charges	Convictions	Dismissals and Acquittals	Discharged from Program Prior to Disposition	Total	
				Number	Percent
Narcotics-related crimes					
Possession of narcotics	8	11	3	22	66.7
Sale of narcotics	6	1	1	8	24.2
Loitering for purposes of obtaining narcotics	3	0	0	3	9.1
Total	17	12	4	33	100.0
Crimes against property					
Petit larceny	6	9	3	18	62.1
Grand larceny	3	0	2	5	17.2
Possession of stolen property	0	2	2	4	13.8
Criminal trespassing	1	1	0	2	6.9
Total	10	12	7	29	100.0
Violent crimes					
Assault	3	6	1	10	66.7
Possession of weapons	2	0	1	3	20.0
Homicide	1	0	1	2	13.3
Total	6	6	3	15	100.0
Minor offenses					
Gambling	2	0	1	3	33.3
Disorderly conduct	1	2	0	3	33.3
Traffic violations	3	0	0	3	33.3
Total	6	2	1	9	100.0

in New York City, a patient who has failed to appear may not be apprehended for some time (9). The procedure the program follows in such cases is to permit the patient to receive treatment for approximately one month before surrendering himself to the court. The patient agrees, having been assured of legal representation. When he does appear in court, he is usually paroled or his bail is reinstated. An effort is made to obtain a final disposition when he surrenders so that the case can be closed. It has been our experience that as long as the court is aware of the patient's progress in treatment, he will not be remanded.

Resolution of warrants is an important part of rehabilitation. Should the patient be arrested, even for the most minor violation, or by mistake, the outstanding warrant may cause him to be incarcerated without bail for several days, thus interrupting continuity of treatment in the community. The patient is made aware of this so that he realizes the risk of concealing outstanding warrants. Answering warrants fosters a sense of responsibility in patients, relieves them of an important source of anxiety, and thus assists them in breaking with the past.

ARRESTS AND DISPOSITION

Although reduction of criminal activity among the patients as a group is considerable, not all patients are able to make a completely successful adjustment even though they no longer have to acquire heroin. During the 12-month period, 64 (six percent) of the 1,026 patients were arrested a total of 86 times. The charges involved are given in tables 1 and 2. One-third (33.7 percent) of the charges were for offenses against property and about 38 percent for offenses involving narcotics and/or marijuana. Two-thirds were for misdemeanors and one-third for felonies. Seventeen percent involved violent crimes such as assault, homicide, or possession of weapons.

Clinical observations concerning the behavior patterns of arrested patients suggest that those who do not have jobs or who derive their livelihood from criminal activities are more likely to be arrested for crimes against property, while those who abuse alcohol or barbiturates are more likely to be arrested for crimes of violence. There appears to be a higher incidence of arrests for possession of drugs among those who associate with drug users than among those who do not.

Patients arrested for misdemeanors usually received representation provided by the program. Most cases ended favorably. The courts have come to understand that, although our program is not always immediately successful, the more time that is alloted to us, the greater the opportunity for rehabilitation. Several patients insisted that they were innocent, and their cases went to trial. In nine out of ten cases, they were acquitted.

CONCLUSIONS

Providing assistance in dealing with legal problems is an important aspect of rehabilitation. In order to render optimal service to patients, we have a number of suggestions.

1. A centrally located legal office in the immediate vi-

cinity of the courthouse would help improve the efficient delivery of legal services and would provide an opportunity for court personnel to learn about the MMTP.

2. Because of the large volume of narcotics cases handled in the courts, it is essential that court and law enforcement personnel be aware of the methadone program and its potential. Comprehensive training seminars about addiction treatment should be instituted.

3. Although many patients are involved in civil suits, such as divorce and custody proceedings, legal assistance is currently confined primarily to criminal cases. Many patients have been denied their civil rights. Ex-addicts and individuals with criminal records often have difficulty obtaining any form of licensing. Our patients have been refused teaching and driver's licenses, and others have had licenses revoked when they volunteered information concerning past addiction or methadone maintenance treatment. Methadone patients are victims of employment discrimination. An unfortunately large percentage of employers refuse even to consider an ex-addict for employment no matter how well he has adjusted to treatment or how highly recommended he is. Thus, many patients discover that it is difficult or impossible to find any livelihood, much less a satisfying one. Such experiences are traumatic. These situations could be remedied, at least in part, through strong action in the courts, whether through pleading individual cases or through class action.

4. We also recommend the provision of comprehensive legal services, including assistance in both criminal and civil matters, for all patients in drug treatment programs.

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Computer Assignment of Psychotropic Drugs

BY IVAN W. SLETTEN, M.D., HAROLD ALTMAN, M.D., M.P.H., RICHARD C. EVENSON, PH.D., AND DONG WON CHO, PH.D.

Data on drug assignment from patients' case records were used to: 1) derive a computer formula for assignment to one of three major drug categories, 2) compare the results from this formula with those from a previous formula using prototype data, and 3) determine the agreement between this formula's results and the drug assignments made by the patients' physicians. The authors conclude that the computer can regularly suggest assignment to one of three major drug categories, although the clinician will still have to make the final decision.

THE MISSOURI DIVISION OF MENTAL HEALTH has a statewide computer network called the Missouri Standard System of Psychiatry (SSOP). In this system extensive clinical information is keypunched from checklist forms on patients cared for at hospitals and clinics. The data are teleprocessed to the computer at the Missouri Institute of Psychiatry in St. Louis (1).

A central goal of the system is to use the data collected to develop computer-based statistical models of psychiatric conditions. When such models are compared with data on individual patients processed in this system, one is able to classify the patient and generate predictions and probability statements about that patient's behavior and outcome. The accuracy of such statements based on the use of statistical methods has been repeatedly compared with the clinician's accuracy. It has been found that the

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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TABLE 1
*Derivation Sample from Actual Patient Data (N = 3,227)**

Assignment by Responsible Clinician	Assignment by Discriminant Function Formula		
	Major Tranquilizers	Minor Tranquilizers	Anti-depressants
Major tranquilizers	1,179	476	308
Minor tranquilizers	157	581	165
Antidepressants	79	91	191

*Agreement = 60.5 percent.

statistical actuarial approach is as accurate as or more accurate than the clinician (2–4). Thus it seems likely that the clinician will benefit from such statistical predictions as he makes his own final clinical decisions (which are predictions) about his patients. Using the Missouri Computer System, the SSOP, and the actuarial approach, we now provide probability statements to the clinician concerning diagnosis, elopement, length of stay, and suicidal and assaultive ideation (5–7).

Since psychotropic drug treatment is based at least in part on mental status findings, we are attempting to develop a system in which the computer can use a set of statistical equations to assign drug treatment for patients on the basis of the patients' mental status findings. Our aim is to provide clinicians with reasonable suggestions about appropriate drug assignment for their patients as soon as they provide the computer with mental status data about the patients.

In our first study (8), 33 senior clinicians in the Missouri Division of Mental Health were asked to indicate those items on our 111-item standard mental status checklist form (9) for which they thought each of ten psychotropic drugs was particularly effective. The ten drugs selected were five major tranquilizers (chlorpromazine, trifluoperazine, thioridazine, fluphenazine, and haloperidol), three minor tranquilizers (chlordiazepoxide, diazepam, and hydroxyzine), and two antidepressants (imipramine and amitriptyline). These ten drugs are officially recommended by the Missouri Division of Mental Health superintendents. Although agreement among clinicians was found to be low for the ten individual drugs, it was found to be good for the three major drug groups. Using these clinicians' mental status ratings and the drugs recommended for each of the mental status profiles, we were able to develop a statistical formula. This formula, when applied to the same data, was able to assign the drug group to each mental status profile in 84 percent agreement with the rating clinician's original drug assignment (on cross-validation). This study gave us a formula for the clinical conceptual prototype concerning which type of drug should be used for which symptoms.

The aim of a second study (10) was to validate with videotaped interviews the formula derived from the first study. Twenty mental status interviews with patients were videotaped. Staff and resident psychiatrists throughout the division viewed sets of these videotaped interviews and filled out the usual mental status checklist and diagnosis form for each interview. In addition, the clinician was asked to indicate the drug of choice (from among the above ten) or to indicate that no drug be prescribed. From 21 to 33 psychiatrists rated each of the 20 interviews and a total of 500 ratings was obtained.

Since the statistical formula developed in the first study made no provision for a "no drug" assignment, two analyses were made of the videotaped data. The first omitted all "no drug" assignments made by the clinicians, resulting in 67 percent agreement between the formula and the consensus of the clinicians rating the videotaped interviews. It was noted, however, that the computer typically assigned "no drug" patients to the minor tranquilizer group. The similarity between patients receiving minor tranquilizers and those receiving no drug has also been noted by Overall and associates (11). In the second analysis, we assigned "no drug" patients to the "minor tranquilizer" group, and an increase in agreement to 75 percent was noted. In this second analysis, the computer, using the statistical formula from the prototype data, agreed with the clinical consensus about as well as the clinicians agreed among themselves (77 percent).

In the study to be reported here, actual drug data from patients' case records were used. Our aims were: 1) to derive a discriminant function formula from these data for the three major drug categories, 2) to compare results using the formula from actual patient drug data with the formula developed in the study using the prototype data, and 3) to determine the agreement between drug assignment by the formula derived from these actual data and the drug assignment made by the actual clinicians in the field.

METHOD

Inpatients from four Missouri Division of Mental Health facilities were studied. If the patient had had the automated standardized mental status examination (that used in the above studies) and if he had been assigned by his physician to one of the ten above-mentioned psychotropic drugs, he was included. There were 6,477 patients who fitted the criteria. They were then assigned to one of the three major drug categories—major tran-

TABLE 2
*Validation Sample from Actual Patient Data (N = 3,250)**

Assignment by Responsible Clinician	Assignment by Discriminant Function Formula		
	Major Tranquilizers	Minor Tranquilizers	Anti-depressants
Major tranquilizers	1,234	461	337
Minor tranquilizers	149	500	155
Antidepressants	103	98	213

*Agreement = 60.0 percent.

TABLE 3
Mental Status Items That Best Discriminate Among the Three Drug Groups

Rank	Item	Assignment
1	Doesn't know why hospitalized	Major tranquilizer
2	Mood depressed	Antidepressant
3	Flat affect	Major tranquilizer
4	Shows silliness	Major tranquilizer
5	Inability to understand proverbs	Major tranquilizer
6	Delusions of persecution	Major tranquilizer
7	Sad facial expression	Antidepressant
8	Fragmentation of thinking	Major tranquilizer
9	Guilt feelings	Antidepressant
10	Motor activity decreased	Antidepressant
11	Clothing and hygiene poor	Major tranquilizer
12	Speech excessive in amount	Major tranquilizer
13	Suicidal thoughts	Antidepressant
14	Perseveration	Major tranquilizer
15	Slow verbalization	Antidepressant
16	Delusions of worthlessness	Antidepressant
17	Expressionlessness	Major tranquilizer
18	Unrealistic hostility	Major tranquilizer
19	Impulsive acts	Minor tranquilizer
20	Insight and doubt about hallucinations	Major tranquilizer

quilizers, minor tranquilizers, and antidepressants—depending on which of the ten drugs they had been assigned to by their physicians. These patients were alternately assigned to a derivation and a validation sample. A discriminant function formula was developed from the derivation sample. It was then used on the mental status profiles of patients in the validation sample to assign the patient to one of the three drug categories. The drug assignments made by the statistical formula were compared with the drug assignments actually made at the outlying hospitals by the clinician caring for the patient. Agreements were then calculated between the computer formula and the clinician.

These same discriminant functions derived from these actual patient drug data were also applied to the data from the earlier, videotaped study. In the videotaped study, the consensus of all the clinicians rating that interview was used as the criterion.

RESULTS

Tables 1 and 2 show the results of applying the discriminant function formula developed from the actual patient data to the mental status ratings of these actual patients. For the derivation sample the agreement between formula and clinician was 60.5 percent and for the validation sample it was 60 percent. This agreement is somewhat lower than the 75 percent agreement between clinician and computer obtained with the videotaped data using the prototype formula. This may be the result of having to use a less valid criterion of drug assignment in the actual drug-data validation, in which we have the opinion of only one clinician, than in the videotape validation, in which a consensus of raters' opinions was used. It may also have resulted from the fact that the videotaped patients represented a sample of patients easier to classify in terms of drug assignment than is the average patient seen by the clinician.

Other problems with the actual patient data were that patients were sometimes receiving more than one drug, which would indicate a mixture of symptoms, and that the mental status reports may not always have been completed at precisely the same time that the drug assignment was made. In either case the formula, whether derived from actual or prototype data, produced results when applied to the videotaped data that agreed with the clinical consensus found in the videotaped data (i.e., 74–75 percent) approximately as well as the clinicians agreed among themselves (i.e., 77 percent) when they rated videotaped interviews.

Comparison of the 60.5 percent agreement for the derivation sample with the 60 percent agreement for the validation sample indicates that the discriminant function is extremely stable. This stability results from the large sample size used in deriving it and the high ratio of the number of subjects—3,227—to the number of mental status items—20—used in the functions.

Table 3 shows the 20 mental status items used in the discriminant functions validated in this study. They are ranked in the order in which the stepwise discriminant function program (12) used to derive the formula entered them into the equations. They are listed in decreasing order of their ability to determine assignment to one of the three drug categories.

Table 3 also indicates which items are correlated with the patient's being assigned to one of the three drug categories. These findings help clarify how practicing psychiatrists proceed as they make decisions about the type of drug to give a patient. For example, in table 3 it is noted that in the presence of psychotic symptoms clinicians assign the patient to a major tranquilizer, that if depressive symptoms are present they assign an antidepressant, and that if neither psychotic or depressive symptoms are present they assign a minor tranquilizer.

Clinician Agreement

We derived the percentage of agreement among clinicians for each of the 20 interviews. Also, we derived the percentage of agreement between the consensus of the raters for each of the 20 videotaped interviews and the computer formula derived from actual data. These two types of agreement were correlated to see what effect the level of clinical agreement had on the formula's accuracy in making drug assignments. The correlation was .47.

This correlation leads one to conclude that the agreement between computers and clinicians tends to decrease as clinical agreement decreases. The lack of agreement among clinicians limits one's ability to derive statistical formulas that work precisely—in this case, to assign drugs in agreement with the clinician. If clinicians do not agree among themselves, then one cannot get the computer formula to agree with them.

Comparison of Formulas

Using the formula derived from actual patient data on the videotaped interview data, an agreement of 74 percent was noted with the consensus of the videotape raters. This agreement is similar to the 75 percent agreement on the videotaped data using the formula derived from the clinical prototype data. The sets of functions from the prototype data and the actual data would therefore seem to be about equally accurate. This is not, however, a measure of whether they assign patients to drug groups in an identical manner. A better measure of that is the correlation between their agreement for the 20 interviews (i.e., do they assign drugs in the same way?). The correlation coefficient of .62 suggests that the disagreement between the two is fairly large. This is also suggested by the fact that only four of the 20 mental status items appearing in the discriminant functions derived from actual data also appear among the 20 items in the functions derived from the prototype data, and by the fact that, of the items which are the ten best discriminators for each of the two types of data, there is an overlap of only one item. One is led to the conclusion that the similar accuracy but rather dissimilar mode of operation of the two sets of functions should cause them to complement one another, so that, if they were used in conjunction, a level of accuracy could be obtained that would be greater than for either used alone.

CONCLUSIONS

The various indices of agreement between clinicians and computer formulas presented here are encouraging. It seems likely that drug assignment can regularly be suggested by the computer in terms of probabilities concerning which of three groups of drugs the patient would likely receive if he were treated by a clinician in the Missouri Division of Mental Health. Our plan is to provide such suggestions to our clinicians using our computer and teleprocessing systems. The clinician will continue to make the final decision on drug assignment, but he will have the benefit of knowing what other clinicians would probably prescribe. Other considerations the clinician must make before deciding on a drug for a patient relate to the side effects, allergic reactions, and a patient's past therapeutic responses to particular drugs.

The next, and most challenging, step will be to correlate patient drug treatment with actual changes in symptoms and community adjustment in order to study drug effectiveness on a state-wide basis.

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Use of Alcohol by Addict and Nonaddict Populations

BY BARRY S. BROWN, PH.D., NICHOLAS J. KOZEL, M.S., MARILYN B. MEYERS, M.A., AND ROBERT L. DUPONT, M.D.

The authors studied the use of alcohol by a sample of narcotics addicts (N=140) and by a sample of nonaddict nonalcoholics (N=100). They found that the addicts' use of alcohol prior to their use of heroin significantly exceeded that of the normal sample. However, the addicts' use of alcohol decreased as they became involved with heroin and did not increase during treatment.

THE ABUSE OF ALCOHOL BY NARCOTICS ADDICTS has become a cause for concern among many members of the narcotics treatment community. Gearing (1) has found that approximately 20 percent of a sample of methadone maintenance patients discharged from a program had been discharged as a consequence of alcohol abuse. Earlier studies (2–4) reported the addict as having been a relatively heavy drinker prior to his use of drugs, thereby establishing a basis for later difficulty with alcohol. Most studies that have examined patient performance after treatment has been initiated reported relatively little alcohol abuse while the patient remained in treatment (5, 6), but significant alcohol abuse after the patient graduated from treatment (7, 8). However, one study of posttreatment performance found little evidence of alcohol abuse although its subjects had dropped out of treatment (9).

One problem with which these studies have had to contend is the absence of detailed information regarding addicts' alcohol intake both before and after treatment has been initiated. Moreover, basic research comparing the addict's use of and experiences with alcohol with those of his nonaddict peers is similarly not available.

In order to learn the extent to which difficulties with alcohol may pose a problem in rehabilitation efforts, a study was designed that would permit a full description of alcohol use by an addict sample. At the same time it was decided to broaden the study to permit comparison of alcohol use by addicts with that by nonaddicted nonalcoholics.

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The authors wish to thank Dr. Sami A. Khoury, D.C. Community Health Services Administration; Dr. Dorothee F. Mindlin and Ms. Doris S. Bradley, D.C. Mental Health Administration; and Ms. Josephine C. Brewton, Opportunities Industrial Center, for their cooperation and assistance in making this study possible. They also wish to thank Ms. Barbara Tatham for her help in interviewing the subjects.

METHOD

Two populations were selected for study: 1) an addict group drawn from the patient population of the D.C. Narcotics Treatment Administration (NTA), and 2) a nonaddict, nonalcoholic group drawn from the D.C. Opportunities Industrial Center. Each of the samples was then divided into male and female groups. The final samples obtained were as follows: 1) a male patient-addict group (N=90); 2) a female patient-addict group (N=50); 3) a male nonaddict, nonalcoholic group (N=50); and 4) a female nonaddict, nonalcoholic group (N=50).

The two male samples did not differ significantly in age, education, marital status, race, and current employment. The two female samples were similarly equated.

Almost all of the addicts sampled (89 percent) were receiving methadone and were being counseled. The remainder (N=16) were enrolled in the detoxification-abstinence program. The entire sample of addicts being studied had been in treatment for an average of 5.08 months.

All individuals selected for study were given structured interviews designed to elicit information about their normal intake of alcohol, and in the case of the addicts, their intake of alcohol prior to and during their use of heroin. Additional questions were asked regarding the subjects' past functioning and the impact of alcohol on their social and vocational functioning.

RESULTS

All quantities of alcohol were converted to ounces. Using analysis of variance techniques, comparisons were made of the amounts the patients consumed before, during, and after their use of heroin. As shown in table 1, the use of alcohol generally declined after heroin use began, although this decline achieved significance for both sexes only for reports of hard liquor consumption ($F=5.52$, $p<.01$). Among men there was also a significant difference in wine consumption before and after addiction ($F=3.93$, $p<.05$). In addition, a difference in wine consumption was found between men and women; men consumed greater quantities of wine than women ($F=4.93$, $p<.05$).

TABLE 1
Means and Analysis of Variance for Alcohol Use Before, During, and After Addiction

Period of Use	Wine		Beer		Hard Liquor	
	Percentage	Mean Ounces	Percentage	Mean Ounces	Percentage	Mean Ounces
Before addiction						
Men	64	43.36	84	120.30	69	18.07
Women	48	3.62	82	96.35	72	9.75
During addiction						
Men	47	22.95	54	54.01	20	1.18
Women	28	10.87	50	65.06	10	3.87
After addiction						
Men	37	9.88	53	59.80	31	2.33
Women	24	9.14	58	98.28	26	5.56

As also indicated in table 1, the number of addicts consuming alcohol decreased after they began using heroin. This was true for both men and women and for all alcoholic beverages studied. Again, this decline was greatest for the consumption of hard liquor. The number of those consuming alcohol remained relatively stable from the period of heroin use to the period following treatment when heroin was no longer used. There were some relatively small increases in the number of persons using hard liquor from the period of heroin use to the post-heroin-use period.

Differences were explored between alcohol consumption by addicted men and by the nonaddicted, nonalcoholic men (i.e., normal men). Comparison was made between addicts' preheroin rates of alcohol use and the normal individuals' rates of alcohol use. Results of this analysis are shown in table 2.

The amounts of alcohol consumed by male addicts were consistently greater than the amounts consumed by the normal male group. However, the addicted men differed significantly from normal men only in wine consumption ($t=2.08$, $p<.05$).

A comparison was also made between addicted women and normal women. Here again, the addicts consumed consistently greater quantities of alcohol than the normals. These differences between the groups of women achieved significance for both beer ($t=3.66$, $p<.01$) and hard liquor ($t=2.60$, $p<.02$).

Differences between addicts and normals also appeared in their reports of the difficulties they encountered as a consequence of excessive drinking. As shown in table 3, differences between normal and addicted men were somewhat greater than those between normal and addicted women. While the differences between the addict and normal samples were not great, they were clearly consistent in that the addicts reported a greater frequency of problems associated with excessive alcohol use.

DISCUSSION

Two findings from this study suggest that alcohol has the potential to become a drug of abuse for at least some addicts. On the one hand, addicts' use of alcohol during the period preceding heroin addiction was significantly greater than that by a comparable group of normal, i.e., nonaddicted, nonalcoholic persons. Moreover, addicts, as compared with normals, reported a greater frequency of alcohol-related problems in their functioning in the community. Thus the addicts constituted a group that showed a tendency to make excessive use of particular drugs available to them. For some unknown reason with these individuals the drug of choice became heroin. Consequently, one might anticipate that one unforeseen outcome of treatment for heroin addiction could be the increased use of alcohol.

However, this was found not to be the case. The addicts who were studied were in treatment for an average of nearly six months. During this time, they did not report using alcohol to an extent that was dramatically or significantly different from the quantity they used during the period of heroin addiction when we and others (2, 3) found a decline in their alcohol intake. Indeed, the addicted men reported consuming approximately the same quantities of alcohol postaddiction as the normal men; female addicts, however, continued to consume considerably greater quantities of alcohol postaddiction than their normal peers. Nonetheless, there is no simple turn-

TABLE 2
Use of Alcohol by Normals and Addicts

Sex	Mean Ounces		Level of Significance
	Normals	Addicts	
Men			
Wine	6.99	43.36	$p<.05$
Beer	59.00	120.34	n.s.
Hard liquor	7.94	18.06	n.s.
Women			
Wine	1.76	3.62	n.s.
Beer	19.23	96.35	$p<.01$
Hard liquor	1.82	9.75	$p<.02$

TABLE 3
Alcohol-Related Problems Reported by Addicts and by Normals (in Percentages)

Problem	Men		Women	
	Addicts	Normals	Addicts	Normals
Daily use of alcohol	36	12	20	2
Use of alcohol four or more days a week	42	18	24	6
Unable to stop drinking	11	6	4	2
Shakes and/or delirium tremens	10	0	4	4
Missed work	19	8	2	0
Lost job	2	0	0	0
Marital difficulties	13	0	0	0
Accidents from drinking	19	11	12	0
Arrests for drinking	36	7	6	0

ing to alcohol as the addict turns away from heroin.

In this study two factors may have been at work to limit the degree to which alcohol was abused after treatment was initiated. On the one hand, no effort was made to assess separately the rate of alcohol use by addicts who dropped out of treatment. Although the available evidence conflicts (1, 9), it seems reasonable to hypothesize that a larger percentage of dropouts than of retained clients experience difficulty with alcohol. It is likely that the sample of addicts surveyed here (who averaged about six months in treatment) included relatively few potential dropouts. At the same time, it is conceivable that involvement with alcohol is built up gradually over time and that measuring alcohol use among addicts who have been retained in treatment a still longer period would have revealed an increased alcoholic intake. Thus, there is some indication that with increasing time spent in the community, former addicts tend to become more involved with alcohol (4).

Nonetheless, any such speculation must await further study. The data presented here suggest that patients have a potential for alcohol abuse that is not realized as they become involved in treatment. It appears that the patients who remained in treatment recognized the need to control the use of all drugs and that they made efforts to do so. Such efforts may result from counseling or from more purely intrinsic motivations. At this point it would certainly seem unwise for counseling personnel to simply trust intrinsic motivation or the clients' learning experiences. Instead, counselors would do well to recognize that they are dealing with patients whose life-styles have embraced abusing drugs other than heroin and to modify their counseling efforts accordingly.

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The 24-Hour Serum Lithium Level as a Prognosticator of Dosage Requirements

BY THOMAS B. COOPER, M.A., PER-ERICK E. BERGNER, M.SC., M.D., AND GEORGE M. SIMPSON, M.D.

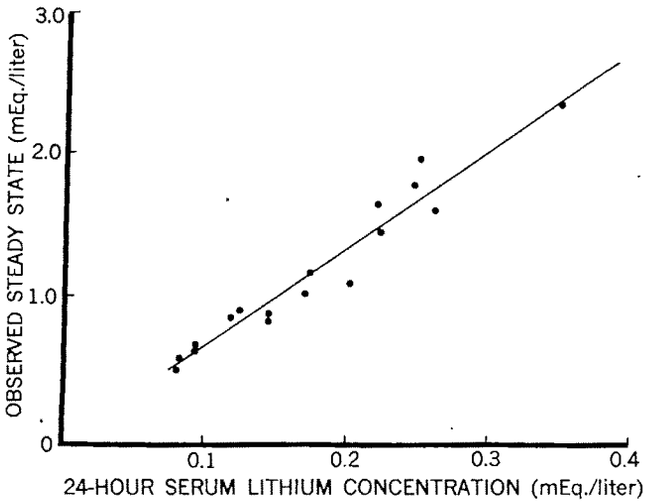
A technique is described that enables a physician to determine a patient's lithium dosage requirement on the basis of a single blood sample collected 24 hours after the administration of a 600 mg. priming dose of lithium. The authors discuss the basis of this technique and emphasize the importance of ascertaining that the patient has ingested the priming dose of lithium.

THE INTRODUCTION of lithium in the treatment of manic-depressive illness has necessitated the careful monitoring

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This work was supported in part by Public Health Service grants RR-05651 from the Division of Research Resources, National Institutes of Health, and MH-03240 from the National Institute of Mental Health.

FIGURE 1
Correlation of 24-Hour and Steady-State Serum Lithium Levels***



*Patient received 600 mg. Li-T.I.D.
**The least-square equation is: steady state = 6.8 (24-hour level) –0.02.

of plasma levels to guard against toxicity. The large interpatient variability in the daily dosage required to achieve a therapeutic level of the drug can lead to a patient's being given too little medication for a considerable period of time before a satisfactory regimen is instituted. At our research center we have patients receiving less than 600 mg. of lithium per day and others receiving more than 3 gm. per day with comparable plasma levels.

We have investigated the possibility of determining a dosage schedule for each patient using a pharmacokinetic approach (1). Data on single-dose responses were collected by giving patients 600 mg. of lithium and then collecting blood samples at one, two, three, four, six, eight, and 24 hours after this loading dose. Using this technique we can accurately predict an individual patient's dosage requirements. However, this approach involving multiple blood samples has little applicability to an outpatient population.

During the past year, all patients requiring lithium treatment were first given a loading dose and, from analysis of these data, predictions were made of their dosage requirements. To date we have completed more than 25 such kinetic determinations and have searched for a less complicated method of predicting dosage requirements

METHOD

The serum lithium determinations were carried out utilizing a Perkin-Elmer Model 303 Atomic Absorption Spectrophotometer fitted with a three-slot Boling burner head. Dilutions of the serum were made with deionized distilled water and the standards were matched for viscosity and electrolyte content by dilution with a known lithium-free serum. As an additional check, the standards were also diluted with six percent dextran in saline solution. This method has been used for several years in our laboratory and has been found to be highly reproducible with a coefficient of variation of less than 1.0 percent.

Patients were given 600 mg. of lithium carbonate followed by 100 cc. of water. The blood samples were then collected on the time schedule described above. Any deviations from this schedule were noted, that is, all blood samples were collected within two minutes of the stated time or a record was made so that the data points could be plotted at the correct time. The serum was then analyzed for its lithium content and a graph of the data obtained was analyzed using a computer technique described in our earlier study (1).

RESULTS

During the investigation described above, it became clear that the level obtained 24 hours after the priming dose was certainly, at the intuitive level, a good indicator of those patients for whom the standard drug regimen would not be satisfactory. To check this further we have run correlations between the 24-hour serum lithium level after a single priming dose and the steady state later achieved for each patient. A very high correlation was found ($r = .972$). On reviewing all our kinetic data it is clear that we can, with confidence, recommend a dosage regimen for a patient from a single blood measurement collected 24 hours after 600 mg. of lithium has been administered. Figure 1 shows the actual data with the line of best fit. Table 1 shows the recommended dosages for patients in various ranges of serum levels after the priming dose.

DISCUSSION

We feel that this technique may be of considerable

TABLE 1
*Dosages Required to Achieve a Serum Level of 0.6–1.2 mEq./liter**

24-Hour Serum Level After Single Loading Dose	Dosage Required
Less than .05	1200 mg. three times a day
.05–.09	900 mg. three times a day
.10–.14	600 mg. three times a day
.15–.19	300 mg. four times a day
.20–.23	300 mg. three times a day
.24–.30	300 mg. twice a day
More than .30	300 mg. twice a day**

*The regimen selected minimizes fluctuation in the plasma level while maintaining a schedule the patient can adhere to. Variation in this regimen can be made at the choice of the clinician, but the total daily dose must remain the same. All "steady state" values are collected just before the next medication is to be taken.
**Use extreme caution.

value for the hospitalized patient who requires lithium treatment, especially in the manic phase. The high cost of hospitalization could be reduced for at least some of the patients who require larger than normal doses of the medication. In an outpatient setting, the patient could see the psychiatrist on one day, be given the medication, and then have a blood sample taken by a nurse or at the laboratory 24 hours later. Treatment could commence from that point, before the analysis had taken place, but the psychiatrist would have the additional information within 24 hours, i.e., whether he was giving a dosage that was either too high or too low.

A word of caution is necessary in the application of this technique. All of the above data are based upon the lithium determinations, and these were carried out in a single laboratory in which the importance of the accuracy of these determinations is fully appreciated. It is recommended that anyone applying the information in these tables do so with care until he determines that the laboratory to which he is sending the serum for analysis is dependable. It is not unreasonable to ask that lithium levels be accurate to the second decimal point.

A recent extensive study (2) of the treatment of acute manic patients with lithium indicates that the optimum therapeutic level of therapy is 0.9–1.4 mEq./liter. However, many authors argue about this so-called therapeutic range (3). We do not wish to enter into this particular disagreement and for this reason we give a regimen designed to achieve a level of 0.6 to 1.2 mEq./liter. In addition, any patient who has a 24-hour serum level (after the single priming dose) greater than 0.3 mEq./liter should be treated with extreme caution. To date we have had only one patient who required less than 300 mg. twice a day to achieve serum levels of 1.2 mEq./liter. Any patient who has a 24-hour plasma level of 0.5 mEq./liter must be regarded as having taken more than the standard dosage of medication, either by obtaining medication from other patients or by having accidentally been given extra medication in the hospital.

It is of course essential that care be taken to ascertain that the patient has ingested the priming dose of lithium. We routinely insist that each patient drink at least 100 cc. of fluid after taking the medication and that the patient be observed for a period of 15 minutes.

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Piperacetazine and Chlorpromazine: A Comparison

BY ALONZA C. JOHNSON, M.D., AND A.S. KULKARNI, M.D., PH.D.

Twenty-six agitated acute schizophrenic patients in a state hospital received intramuscular injections of either piperacetazine or chlorpromazine. Three rating scales were used to assess the effects of the drugs. Both drugs were found to be effective in producing significant improvement in the patients. Piperacetazine appeared to be more potent than chlorpromazine. No side effects were observed.

A RECENTLY PUBLISHED REPORT presented a comparative evaluation of piperacetazine (Quide) and chlorpromazine in their injectable forms, using outpatients in a private psychiatric practice as subjects (1). Piperacetazine was found to be an effective treatment for the control of acute schizophrenic patients. This paper deals with a similar comparison of these two antipsychotic drugs, using schizophrenic patients in a state hospital as the subjects.

METHOD

Twenty-six agitated and uncontrollable schizophrenic patients received either piperacetazine or chlorpromazine (Thorazine) by injection. The injections were given as fol-

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TABLE 1
Diagnostic Categories, Sex, and Drug Assignment (N = 26)

Diagnosis	Number and Sex of Patients	Assigned to Piperacetazine	Assigned to Chlorpromazine
Schizophrenia:			
Paranoid type	20 males	10	10
Acute episode	2 males	1	1
Catatonic type	4 females	2	2

lows: 1 ml. initially (2 mg. of piperacetazine or 25 mg. of chlorpromazine), followed if necessary by 1 or 2 ml. after one hour and 1 to 4 ml. at approximately four-hour intervals thereafter.

Patients were evaluated prior to each injection on a Target Symptom Rating Scale (0 = absent, 1 = mild, 2 = moderate, 3 = severe) consisting of ten items—pacing, combative, uncooperative, tense, hostile, cursing, disabled, destructive, yelling, and angry. Treatment was stopped when it was possible to initiate oral administration of an antipsychotic drug. A patient not showing satisfactory improvement according to the physician's judgment was termed a "failure." The maximum duration of treatment was 72 hours.

Ratings were also conducted using the Brief Psychiatric Rating Scale (BPRS) (2) and the Clinical Global Impression (CGI) (3). Patients were evaluated prior to and at the end of treatment. Data were analyzed by the Wilcoxon (matched-pairs signed-ranks) test (4) to evaluate both the total improvement and the improvement in each item of the scales shown in each group by the respective drugs. The effect of piperacetazine was compared with that of chlorpromazine by the Mann-Whitney U test (4).

The study was conducted using a "blind rater" system, with the rating personnel blind to which drug the subjects were receiving. The drugs were double-blind labeled and packaged in amber glass vials. Amber glass syringes were used to administer the drug.

The patients' ages ranged from 17 to 48 years. Their diagnostic categories and distribution by sex are shown in table 1. Patients were assigned to one of the two treatment groups using a randomization code. Patients for whom acute alcoholism or drug addiction was a possible cause of their signs and symptoms were not included in the study. We also excluded patients who had, at that time or in the past, any condition that could be aggravated by phenothiazine treatment.

RESULTS

All patients in both groups responded favorably to the treatment and became able to take oral medication. Items in the Target Symptom Rating Scale showing significant ($p < .01$) improvement were: combative, uncooperative, tense, hostile, yelling, and angry for both drugs, and cursing and disabled for the piperacetazine group only. The Target Symptom Rating Scale also showed a significant ($p < .01$) overall improvement for both the drugs.

In the piperacetazine group, 11 patients improved after one injection of 1 ml. and two patients after three injections (a total of 3 ml. per patient). In the chlorpromazine group, six patients improved after one injection (1 ml. each) and seven others received a mean of five injections (a total of 6 ml. per patient).

The total scores for the BPRS were also significantly reduced ($p < .01$) by both drugs. The effects on selected items are shown in table 2. Emotional withdrawal, conceptual disorganization, and unusual thought were reduced significantly by chlorpromazine. The sample size available in the piperacetazine group was too small for these items for a meaningful statistical evaluation. Although anxiety was significantly reduced by piperacetazine and not by chlorpromazine, the difference between the two drugs was not significant (Mann-Whitney test).

The CGI revealed that the drugs did not cause a significant improvement (scores of 6.1 before and 5.9 after for piperacetazine, and 6.0 before and 5.8 after for chlorpromazine). The therapeutic effect in the piperacetazine group was moderate in three patients and minimal in ten. In the chlorpromazine group, a moderate therapeutic effect was seen in six and a minimal effect in seven. Systemic side effects or local reactions at the injection site were absent in these patients.

DISCUSSION

The data obtained from the Target Symptom Rating Scale and the BPRS indicated that piperacetazine and chlorpromazine were about equally effective in controlling the aggressive, acute schizophrenic patients. Animal studies (5) have shown that piperacetazine is up to 50 times as potent as chlorpromazine in certain pharmacological procedures. Therefore, a 2 mg./ml. solution of piperacetazine and a 25 mg./ml. solution of chlorpromazine were employed in this study. An average of 100 mg. of chlorpromazine (4 ml. of 25 mg./ml.) was necessary to control the patients, whereas not more than 4 mg. (less

TABLE 2
Scores on Brief Psychiatric Rating Scale Before and After Treatment

BPRS Item	Piperacetazine Before	Piperacetazine After	Chlorpromazine Before	Chlorpromazine After
Anxiety	4.7	3.9	3.6	3.2*
Tension	6.2	5.2	6.2	4.2
Hostility	5.9	4.5	6.4	3.8
Suspiciousness	5.5	4.5	5.4	3.8
Uncooperativeness	6.2	3.8	6.5	3.3
Excitement	5.9	4.2	6.2	3.5
Total BPRS score	68.6	58.7	62.4	45.9

*Not significant; all other changes are significant ($p < .01$).

than 2 ml. of 2 mg./ml.) of piperacetazine was needed to achieve similar results. This finding supports the greater potency of piperacetazine reported in earlier animal studies (5). Similar differences in potency between the two drugs were found when oral medication was administered to patients (6); the mean daily dose for piperacetazine was 116 mg. and that for chlorpromazine was 647 mg.

The Target Symptom Rating Scale and Brief Psychiatric Rating Scale indicated significant overall improvement in both drug groups. The Clinical Global Impression did not reflect the effectiveness of the two drugs. All patients improved and were manageable enough to permit initiation of oral treatment. Side effects were absent with the two drugs. These findings lead to the conclusion that piperacetazine injection is a useful form of treatment, similar to chlorpromazine injection, in the immediate control of the acute schizophrenic patient.

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LETTERS TO THE EDITOR

Contradictions in the Alcoholism Criteria

SIR: The recently published "Criteria for the Diagnosis of Alcoholism" by the National Council on Alcoholism (August 1972 issue) seem to contain a contradiction that I would like to see clarified.

The criteria presented are classified according to various principles; the two classifications that appear to be contradictory are those according to "diagnostic levels" on the one hand and those according to "major" and "minor" criteria on the other. As explained on page 129, "diagnostic level" denotes the certitude with which the given criterion indicates alcoholism: Level 1 is "obligatory" (i.e., a person satisfying this criterion "*must* be diagnosed as being alcoholic" [italics mine]), while level 2 and 3 criteria are only "probable" or "potential" indicators.

Then on page 130 the committee says: "It is sufficient . . . that *one* or more of the *major* criteria are satisfied *or* that *several* of the *minor* criteria in Tracks I and II are present" (italics mine). From this it would seem to follow that all "major" criteria are those of level 1 (and vice versa) and that all "minor" criteria are those of level 2 or 3 (and vice versa). Yet in examining the tables one finds that several major criteria are weighted as 2 or 3, and some minor ones as 1. This leads to the paradox that a person with beriberi "who drinks regularly" (Table 1, Track I, B) should be considered as *possibly* alcoholic, both by virtue of the indicated level 3 weighting and, in my opinion, by the very nature of the case. Yet, at the same time, this criterion alone suffices for the *definitive* diagnosis of alcoholism because it is listed as a major one! Several other examples can be found by examining both of the tables.

Unless we are dealing with typographical errors, it would seem that either the committee committed an oversight or else there is a hidden rationale in these classifications that is not sufficiently explicit, at least for this reader.

In any event, I would appreciate a clarification of this seeming contradiction.

EDMUND F. KAL, M.D.
San Francisco, Calif.

Dr. Seixas Replies

SIR: Dr. Kal's perceptive letter points up an ambiguity in the "Criteria" that we felt to be necessary at the current stage of our knowledge in order to adequately cover some of the difficulties in assessing individual patients for the presence of alcoholism. The "grand design" of the separation into major and minor criteria includes as major criteria items that are indissolubly linked to alcoholism by virtue of the nature of the addiction process. Under this heading comes any physical disease process that originates in the large quantities of alcohol taken by the alcohol-dependent person. Some disease processes might occur fortuitously in a person who also drinks regularly but who is not alcohol-dependent. It is for this reason that a diagnostic level of 2 or 3 was given in some of the disease situations. Should the disease process clearly be the result of the drinking, then there would be no question about the major category and the diagnosis. Thus, the diagnostic level becomes a reminder for diligence in searching for other causes in the disease process.

In the minor criteria one will note in the physical area more in the way of symptoms such as cardiac arrhythmias, which, even if related to alcohol ingestion, would not imply to such a great degree that the addictive use of alcohol was at fault. Thus, anyone who had beriberi related to his use of alcohol and not directly to nutritional difficulty caused by economic factors, etc., should be involved in an alcoholism treatment program. However, if the alcohol use was incidental, there would be no need to involve him in such a treatment program but, rather, to care for his nutritive needs. Therefore, in relationship to alcohol-related diseases the only consideration that decreases the diagnostic level from level 1 to level 2 or 3 is the potentiality of other causes. However, in cases where alcohol-related diseases are definitively associated with alcohol use, we feel that the patient should be entitled to treatment for alcoholism.

This also pertains to the question of the alcoholic blackout; the committee felt that great care was required in separating it from other forms of memory lapse, temporal seizures, or even malingering. A self-report of loss of control over drinking would necessitate similar caution. Among the minor criteria one finds listed two laboratory tests that were placed among the minor criteria for editorial convenience but that are clearly labeled major. The one other minor criterion listed with diagnostic level 1 is the blatant, indiscriminate use of alcohol; whereas this was listed as minor but at level 1 primarily to underline the progressive nature of the condition, it was felt that one observer's view of blatant, indiscriminate use might be another observer's view of moderate use.

I hope that my explanation of this purposeful ambiguity is a sufficient one; we expect that experience in using this on individual cases will provide sufficient clarity for separating those people who will be treated for alcoholism and entitled to the benefits therefore as opposed to those who will remain in the gray area between heavy social drinking and alcoholism.

In a second printing of the Criteria reprints the committee has changed the wording that defines diagnostic levels to read as follows: "*Diagnostic Level 1.* This criterion is clearly associated with alcoholism. *Diagnostic Level 2.* This criterion lends strong suspicion of alcoholism; other corroborative evidence should be obtained." These textual changes, it is hoped, will help in current use of the Criteria.

The Criteria Committee is a continuing function of the National Council on Alcoholism, and we expect to obtain experience ratings based on their use and thus to provide greater clarity in the future. The question raised reinforces the necessity to follow our recommendation regarding diagnosis: "A purely mechanical selection of items is not enough; the history, physical examination, and other observations, plus laboratory evidence, must fit into a consistent whole to ensure a proper diagnosis."

FRANK A. SEIXAS, M.D.
New York, N. Y.

Speaking Out on Jewish Young People

SIR: I am puzzled by Dr. Mortimer Ostow's findings ("The Jewishness of Jewish Young People: A Symposium," November 1972 issue) that young Jews who intermarry are "acting out" and that those who may convert to other religions either are suffering from *pathology* or are simply opportunistic.

Through the years, I have known many people who have done one or the other and have found them to be neither sick nor evil. In converting, some have become Unitarians, many Quakers. Of the latter, it can be said that some of our best Jews are *Friends*.

ROBERT SEIDENBERG, M.D.
Syracuse, N. Y.

SIR: I would like to present another view on "The Jewishness of Jewish Young People: A Symposium" (November 1972 issue).

It was distressing to read Dr. Mortimer Ostow's statements about his concept of the problems of young Jewish people. He states that "few non-Jewish psychiatrists . . . comprehend the nature of the communal pulls, their pervasiveness and depth, and the strength of the historical forces to which young Jews are willy-nilly subject." If this is true, what are the implications? Does he feel a Catholic therapist is the best choice for a Catholic patient, a white therapist for a white patient, a male therapist for a male patient? Or does he feel it sufficient for the non-Jewish psychiatrist to educate him or herself via reading articles such as this one? His failure to spell out what conclusions he wishes to draw from this statement is most serious since it touches upon a fundamental issue in almost any psychotherapeutic situation.

I question Dr. Ostow's statement that the "poor personal motivation" of Jewish young people in institutions of higher learning "subsequently results in their becoming involved in campus protest movements. Often what they are protesting against seems to be, in large part, the pressure to go to school." On the basis of what study or research does he make this statement? If anything, it appears to run counter to some published studies, such as those of Keniston.

I find it particularly offensive that he groups intermarriage as "one of the most common of the distressing forms of adolescent acting out within the Jewish community." Dr. Ostow claims that the various types of intermarriage "betray different degrees of pathology." As a partner in a mixed marriage, I am shocked that a member of the mental health profession calls this pathological per se. To imply that it is healthy for a Jew to marry a fellow Jew and a "problem" or representative of a degree of pathology for a Jew to marry a non-Jew is to imply something that, to my knowledge, has never been adequately researched or documented.

In the absence of any sort of documentation this statement leads one to worry that the author is viewing the world through the colored glasses of a particular brand of Judaism. It behooves the author to identify his own Jewish stance since he obviously has criteria for what constitutes too little Jewish involvement and for what constitutes too much.

I would like to end with a quote from Hartmann and associates:

> To put it concretely: Insight based on psychoanalytic psychology tends to enlarge the cultural area or the number of groups to which one feels linked and toward which one feels responsible; an attitude which can well be characterized by its opposite. To interpret one's own actions predominantly in terms of national character seems to contradict the lesson implicit in psychoanalytic psychology (1, p. 65).

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NANCY SIMON
Wayland, Mass.

Dr. Ostow Replies

SIR: M . Simon and Dr. Seidenberg call attention to a sentence in my paper that is carelessly constructed. I mentioned that the term "intermarriage" covers a number of different phenomena that "arise from different origins and different motivations and betray different degrees of pathology." Both of these correspondents and others who have spoken to me personally have understood the sentence to mean that there is always some degree of pathology. When I wrote it, I intended it to mean that the degree of pathology might be anything from zero to severe. I appreciate the opportunity to make that correction here.

My clinical experience with young people, supported by informal contacts and by reading some of the things that they have written, has led me to make some of the other statements that they challenge: namely, that intermarriage has become one of the most common of the distressing forms of adolescent acting out within the Jewish community (I did not say that all intermarriage was acting out); that "formal religious conversion out of the Jewish community into another religious community occurs relatively infrequently nowadays in the absence of gross psychopathology"; and that in the case of campus protest movements many of the Jewish students "are protesting against . . . the pressure to go to school." To support the last statement, let me simply note that among the college-age population, 90 percent of American Jews are in college. It is not likely that all or most of them are really motivated to obtain advanced education.

Dr. Seidenberg also challenges my statement that conversion out of the Jewish community "at other times and places . . . implied opportunism rather than illness." It is a matter of historical record (so far as I know uncontested by any serious students) that throughout history most conversions out of the Jewish community have been undertaken in order to secure business, academic, or social advantage, or in many, many instances, simply to save one's life. I will concede that with respect to the last category the term "opportunism" is grotesquely inappropriate.

Ms. Simon asks a series of important questions in her first paragraph. They are: 1) To what extent is it important that the psychotherapist share the historical, cultural, and ethnic background of his patient? 2) To what extent can knowledge substitute for a shared background? and 3) Can one answer the former two questions in general, or don't the answers have to be different for different traditions? Is it as important, for example, for an American-born and -educated therapist to share the specific ancestral tradition of a member of a family that has lived in the United States for two centuries as it is to share the background of the adolescent son or daughter of Jewish survivors of the holocaust? It was the purpose of my paper to raise such questions and to suggest that they be discussed by my colleagues. At this moment I have no ready answers, and I look

forward to hearing the opinions of others.

It was not my intention to establish criteria for what is a normal or proper amount of Jewishness. It was my intention to point to certain areas of behavior in which Jewish young people seek to resolve their conflicts about their Jewishness. Reverting to the subject of intermarriage, there is a clear and obvious difference in psychic significance between intermarriage for a young Jew whose family has lived in the United States for two centuries and has been intermarrying for several generations and for the son or daughter of a survivor of the holocaust.

The quotation that Ms. Simon adduces from Hartmann and associates puzzles me, for it seems to contrast so sharply with one of the quotations from Freud I referred to in my article. I reproduce it here more fully. In a preface written for a Hebrew translation of "Totem and Taboo," Freud wrote in 1930: "If the question were put to him [i.e., Freud]: 'Since you have abandoned all these common characteristics of your countrymen, what is there left to you that is Jewish?' he would reply: 'A very great deal, and probably its very essence.' "

MORTIMER OSTOW, M.D.
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Lobotomies Defended

SIR: Dr. Peter Breggin's Letter to the Editor "Lobotomies: An Alert" (July 1972 issue) may have its value as a warning against the excessive and indiscriminate use of the procedure. His total rejection of lobotomies, however, is as unwarranted as a total rejection of appendectomies just because complications may arise and some appendices have been removed without justification.

I heard Dr. Breggin's paper (1), which was presented to the Fourth International Congress of Social Psychiatry. It was emotional; patients were called clients (apparently Dr. Breggin is an apostle of the Szaszian faith), and in general, one had the impression that he fitted the procedure into a metaphysical rather than a scientific framework. It is of interest that Salter (2), in writing for *Medical Opinion*, had a similar impression of a paper by Dr. Breggin, which was delivered at a conference on violence in Houston, Tex.: "Much of the audience thought he delivered it in a more political than scientific style. It was half-shouted, and bulging with inaccurate J'accuses."

The recrudescence of lobotomies, so deplored by Dr. Breggin, is just an indication of the failure of other methods in intractable cases. The desperate need to help such patients led me to refer two of them to Dr. William B. Scoville for orbital undercutting (3). I was gratified with the results.

Case 1. A 47-year-old female patient underwent orbital undercutting in May 1970 because of a history of continuous depression interrupted by short periods of well-being since mid-adolescence.

There was a history of depression in her family. Her only son committed suicide at the age of 15. Electroconvulsive therapy, administered in 1955, kept her well for about one year. I have been seeing her since 1960. Psychotherapy, antidepressive drugs, environmental manipulation, and occasional hospitalizations for ECT were marked by diminishing returns as time advanced. Life at home was completely disrupted. The husband was in despair, and his life became constricted by the wife's illness.

The patient returned from the operation relaxed and content. Her affect was flat. She slept well. For the first six months or so she felt fatigued and lazy, yet it was a great overall improvement. Interestingly enough, her menopausal symptoms disappeared, and she did not need conjugated estrogens (Premarin) for a period of nine to ten months. Within a year her affect acquired more color. Occasional mild depressive episodes of short duration reoccurred, but they were easily curtailed by the administration of tricyclic drugs.

At the present time, over two years after the procedure was performed, the patient still functions better than before and both she and her husband feel gratified. I could not find reduction of judgment or manifestations of organic brain disease. An EEG taken in November 1971 was normal.

Case 2. A 58-year-old female patient was hospitalized for attempted suicide in early 1950 with a diagnosis of schizophrenia. Following her discharge from the hospital, she had no difficulties until 1965, when her son was found to be a drug addict. She became preoccupied and depressed. She had exhibited an increasingly deepening depression with occasional catatonoid features and a blank, perplexed facial expression since 1967. Monoamine oxidase inhibitors, which were moderately helpful in the beginning, later caused edema, low blood pressure, and dizziness without improving her mood to an appreciable degree. Two series of ECT in a private sanitarium resulted in unremarkable and short-lasting improvement. She lost considerable weight. She looked pale, fatigued, and generally ill.

She was operated on in June 1971. I saw her 12 days after the operation. I then wrote to Dr. Scoville: "The change is remarkable. Her husband says he is highly pleased and that she is as she used to be 25 years ago. Instead of agitation and [a] feeling of emptiness there is contentment and complete relaxation. In fact she seems to be less flat than before."

Like the first patient, this woman was fatigued for about six months. She gained weight and, except for a depression lasting five days a few months ago, her mood has continued to be good. In February 1972, she had a status epilepticus, which was stopped by administering diazepam (Valium) intravenously. A week later her EEG was normal, but she is taking anticonvulsive medication as a precautionary measure. Currently she is content, taking care of the house and babysitting with her grandchildren. Both she and her husband are gratified with the results.

No metaphysical reasoning by professional humanitarians or disruptions of the Houston conference by nonmedical rabble invading the hall (2) will convince me that these two women would have been better off with their suffering than they are at the present time.

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EUGENE REVITCH, M.D.
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Dr. Breggin Replies

SIR: In his attempt to undermine my criticism of lobotomy and psychosurgery, Dr. Revitch stoops to a personal attack in which he repeats some lies about me and then makes up one of his own. He refers to an article by a colleague of his who quotes me as supporting a leftist demonstration at a recent medical conference, when in fact tape recordings show that I stood up to dissociate myself from the demonstration. Dr. Revitch himself then says that he "heard" my "emotional" speech on psychosurgery at the Fourth International Congress of Social Psychiatry in Israel. Poor Dr. Revitch—no one told him that other obligations called me away from the conference and that I never gave any speech on psychosurgery!

Dr. Revitch also attempts to attack me (while avoiding the issues) by making a slur upon the work of Dr. Thomas Szasz. He is certainly right that I have a great deal of respect for Dr. Szasz, who is the most serious scholar writing in American psychiatry today. Perhaps Dr. Revitch is unable to deal rationally with the straightforward logic and detailed research characteristic of Dr. Szasz's work.

In defense of lobotomy Dr. Revitch again speaks irrationally when he compares lobotomy to an appendectomy. In an appendectomy there is evidence of disease in the organ. In lobotomy there is none. Instead, the normal functioning of the brain is impaired in order to make the person more docile and less human. A more correct analogy to lobotomy would have been the barbaric practice of amputating the genitals to control a sexual problem.

Dr. Revitch's own statements in reporting the case histories indicate that he knows there is nothing wrong with the brain of either one of his patients, and further, that he knows that surgical intervention actually blunts the functioning of the previously normal brain. Thus he baldly tells us, "Her affect was flat," *after* the surgery. He apparently favors a brain-damaged, docile housewife to an anguished, intact human being. The Women's Liberation Movement has been justified in its opposition to the return of psychosurgery.

I also want to point to Dr. Revitch's description of the first patient as an object whom he manipulates in every conceivable fashion—in part to make her less disruptive to her husband. I would also question his judgment in keeping a woman under his treatment for *ten years without success* until, in futility, he mutilates her brain. Since psychiatric treatment depends so much upon personal rapport and other unfathomable factors in the patient-doctor relationship, I would think it imperative to refer such a patient elsewhere long before resorting to brain mutilation.

I have written extensively (20,000 words, 100 references) about the unscientific nature of psychosurgery (1, 2), and I make this material available to anyone who is interested. Suffice it to say, there are *no* controlled data that support psychosurgery, but controlled follow-up studies have uniformly found the patients to be psychiatrically unchanged, except for the addition of surgically-induced brain damage.

In these same references and in my first novel (3), I have analyzed some of the political dangers inherent in psychotechnology; I elaborate on the dangers of psychosurgery in some depth in another novel (4). These political issues became very much alive recently when a group of psychosurgeons went directly to Congress to obtain a million dollars to support their work, which they have publically promoted as a solution to "student," "racial," and "police" violence. A coalition of conservative senators, plus some liberal senators, stood up to resist this threat to the traditional American value of political freedom.

I myself am deeply conservative with regard to psychiatric treatment. I believe that the first injunction is to "do no harm," and that we must never allow ourselves to assault the integrity of anyone's brain, even in the most earnest wish to help. When Dr. Revitch chooses to reduce a person's suffering at the cost of the person's mind, he is close to committing euthanasia—a partial murder of the living human being. No person, however well-intentioned, should take upon himself the power of life and death over another person's mind.

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PETER R. BREGGIN, M.D.
Washington, D.C.

Antinuclear Factor: Age and Sex

SIR: We have read with interest the article "Antinuclear Factor in Psychiatric Disorders," by Dr. Hans von Brauchitsch (June 1972 issue), about the increased prevalence of antinuclear factor in psychiatric patients. Since this is a new and important finding, we believe some features of the work deserve comment.

We know of several large-population studies which have shown that the prevalence of antinuclear antibodies is greater in women than in men and increases with advancing age. Depression is also more common among women than among men and increases in prevalence with advancing age. We are therefore disappointed that Dr. von Brauchitsch did not state whether he took the precaution of matching the control subjects and patients for age and for sex. If this was not done, we suggest that his results may be invalid.

GRAHAM MELLSOP, M.B.
SENGA WHITTINGHAM, M.B., PH.D.
Melbourne, Australia

Dr. von Brauchitsch Replies

SIR: The point raised by Drs. Mellsop and Whittingham is well taken. As a matter of fact, I discussed that particular issue in my original presentation of the paper at the 1971 APA annual meeting but omitted it in the final publication for brevity's sake.

The patient sample in my study was too small to allow a meaningful statistical analysis by age, sex, and diagnostic group. It was possible, however, to observe the same trend in the sample as described for the general population. The question that cannot be answered at the present time is whether the higher frequency of positive antinuclear factor reactions in the older female patient group was caused by the fact that the patients were older and women or whether it correlated with the prevalence of depressive reactions in that patient group.

HANS VON BRAUCHITSCH, M.D.
Detroit, Mich.

Viet Nam: The Board of Trustees Steps Out of Bounds

SIR: I read with regret the recent resolution by the APA Board of Trustees on Viet Nam policy (July 1971 issue). I expected psychiatrists to have better control of their reaction formations. I believe that their recommendations were unwise as policy, but I do not have the space to go into my reasons.

More important here, I believe that the Board of Trustees should not make such a resolution because it carries the prestige of psychiatry into what I consider an illegitimate area.

The reasoning which says that because psychiatry does have scientific evidence on the effects of war on personality, it may therefore make recommendations about policy on a particular war is untenable (except for strictly psychiatric aspects). To know how best to handle the Viet Nam situation with its global ramifications requires expertise in international relations, political science, economics, military science, etc., as well as in psychiatry (psychology).

If I were to subscribe to the Trustees' reasoning, I could say that since I, as a psychologist, know the effects on personality of various physical diseases, I am therefore competent to prescribe how these physical diseases should be treated and cured. I do not think you would subscribe to this conclusion.

It is my belief that individual psychiatrists may have opinions and even expertise on the complex problems of war and poverty and may speak out like any citizen. But as psychiatrists, and especially as representatives of a prestigious psychiatric organization, they should only make recommendations on strictly psychiatric issues.

ED J. GUNDERSON, M.A.
Milwaukee, Wis.

Compulsive Water Drinking

SIR: The article "Psychogenic Water Intoxication: A Case Report" by Drs. Michael Devereaux and Ruth McCormick (November 1972 issue) thoroughly describes a highly dramatic medical emergency situation that may occur in psychiatric patients—especially those with schizophrenia. The compulsive drinking of great quantities of water in a relatively short period of time and as a result of delusions was described in Resnick and Patterson's case of a 31-year-old chronic schizophrenic man who claimed that the Virgin Mary had commanded him to drink holy water (1).

Psychogenic water intoxication as a response to delusions also occurred in one of our patients; his case history further corroborates Devereaux and McCormick's findings.

> This patient was a 38-year-old man with a long history of hospitalizations for paranoid schizophrenia and episodic alcohol abuse. Four days before one admission he had begun to hear voices, had become extremely anxious and agitated, and had stopped eating food but had drunk one glass of water after another while pacing the floor. After recovery, he explained that he had had to drink the water in order to prepare himself since he was about to be sucked into the sun.
>
> On the fourth day of excessive water intake he complained of headaches and had gone to bed. An hour later he suffered tonic-clonic convulsions lasting for about ten minutes. Two additional generalized seizures occurred on the way to the hospital.
>
> On admission the patient responded only to painful stimuli and to the gag reflex. His pupils were constricted and fixed. Tendon reflexes were increased bilaterally and the Babinski reflex was positive.
>
> Blood chemistry studies showed the following results: serum sodium—111 mEq./liter, blood urea nitrogen—11 mg./100 cc., potassium—3.5 mEq./liter, glucose—143 mg./100 cc., and bicarbonate [2]—20.5 mEq./liter. The calculated sodium deficit was 1400 mEq./liter. A portable chest X ray showed normal findings. The patient was given 130 mg. of sodium luminal intravenously, and the sodium was very gradually replaced with a 5 percent solution of sodium chloride. Within 24 hours the patient regained consciousness but remained grossly psychotic, requiring high dosages of phenothiazines. He was discharged after three months, and a follow-up examination eight months later showed no recurrence of compulsive water drinking.

REFERENCE

1. Resnick ME, Patterson C: Coma and convulsions due to compulsive water drinking. Neurology 19:1125–1126, 1969

WIEBKE K. THOMSEN, M.D.
BRUCE PRINCE, M.D.
TERRY KILGORE, M.D.
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The Weed System and Psychiatry

SIR: For the psychiatrist who practices in a hospital setting a relatively new system of medical record keeping has been instituted at several psychiatric hospitals around the country. I am referring to the "Weed System" or problem-oriented record (1). The Georgia Regional Hospital at Atlanta (GRHA) is one of the first psychiatric hospitals in the United States to fully convert its record system to the problem-oriented approach. I would like to comment on the reactions of psychiatrists toward the Weed System at this hospital.

GRHA is a 500-bed inpatient facility that serves metropolitan Atlanta. It consists basically of nine inpatient units. Each unit has a multidisciplinary team of mental health professionals that directs the treatment of patients. In-service training is available at the hospital to familiarize all mental health professionals with the Weed System.

At GRHA the Weed System has now been in effect since August 1971. One of the main issues of concern is orienting the staff to chart their impressions regarding specific problems on each patient's problem list. At this point it appears that of all the mental health professionals, the psychiatrists are the most resistant to the problem-oriented approach. Reasons psychiatrists give as to why they do not chart according to the problems are as follows: 1) failure to remember to chart according to the Weed System; 2) it takes too much time; and 3) sometimes the progress notes, orders for medications, etc., do not coincide with any of the stated problems. Of all the mental health personnel at the hospital with whom I have discussed the Weed System only the psychiatrists voice complaints about problem-oriented record keeping.

No conclusions can be drawn at this point, but it appears that, at least at this hospital, the psychiatrist is most resistant to the problem-oriented record. If the Weed System becomes an accepted standard for mental health record keeping, psychiatrists will have to reorient themselves or face the possibility of being resistant to constructive change in the health care delivery system.

REFERENCE

1. Weed LL: Medical Records, Medical Education and Patient Care. Cleveland, Ohio, Press of Case Western Reserve University, 1971

L.H. LIPSIUS, M.D.
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The Death of Lyndon B. Johnson

SIR: Mr. Johnson is dead. Already from television and other news resources a picture of mixed facts and feelings has emerged. Particularly notable was a rerun of one of Mr. Johnson's last public appearances at the Johnson Library when he was observed to inconspicuously take a pill (later identified as a coronary vasodilator) while continuing to talk on a subject of vital interest to him—racial equality. I did not see him do this on the initial showing but did recall the commentators' noting that Mr. Johnson had entertained more questions than his physicians would have liked.

What will be the psychological effects on the people of this country and the world? I can recall speculating and pondering with colleagues on the symbolic significance of his announcement that he would be stepping down from the Presidency like a death knell of a father who might have failed his children, some of whom were angry, critical, and accusatory. I wondered too what people thought of this man who returned to a life he loved and could let his hair grow long after an "awesome" job.

What will be the effects of his death that we will not see and that we will see, on our couches, in our offices, in our clinics, and on the streets? We know of the range of reactions, from depressions to psychoses, that follow in the wake of a public figure's death.

What will we see now?

ANTHONY S. SCHUBERT, M.D.
Avon, Conn.

BOOK REVIEWS

Perspectives in Neuropharmacology: A Tribute to Julius Axelrod, *edited by Solomon H. Snyder, M.D. New York, Oxford University Press, 1972, 404 pp., no price listed.*

Perspectives in Neuropharmacology is a collection of 12 research reports and reviews by students and colleagues of Julius Axelrod, the 1971 recipient of the Nobel Prize for physiology and medicine. The contributors are among the most distinguished investigators in many areas of biochemical neuropharmacology. This volume was conceived of prior to the announcement of the Nobel Prize, as a Festschrift to honor Dr. Axelrod at the 1971 meeting of the Federation of American Societies of Experimental Biology.

In it are to be found eight papers concerning the chief area of Axelrod's interests, the catecholamines and indoleamines, including studies on the synthesis, storage, and catabolism of catecholamines and indoleamines, the role of the sympathetic nervous system in hypertension and white adipose tissue, and chemical, surgical, and immunological methods for producing sympathectomy. Other reports cover the isolation of the presumptive cholinergic receptor of the Torpedo electric organ, the possible role of histamine as a brain neurotransmitter, the pharmacology of gamma-aminobutyric acid (GABA) as an inhibitory neurotransmitter at a variety of synapses, and the interaction of estrogens, progestational agents, and androgens with brain and the pituitary gland and their role in the control of ovulation.

The essays are, without exception, not intended for the casual student of neuropsychopharmacology. The format of each is usually a terse but comprehensive and masterful review of a broad field followed by enticing illustrations of the author's current research and his thoughts about future research directions. Only a handful of the readers of this journal would be comfortable with these articles, but a prior reading of a text such as Cooper, Bloom, and Roth's *The Biochemical Basis of Neuropharmacology* (1) might provide the necessary background.

To be able to follow the material in this volume would be very desirable for psychiatric clinicians who want to keep up with the basic research that underlies current concepts of the biological etiology of the major mental disorders and the mechanism of action of psychotropic drugs. For example, the amino acid tryptophane has been proposed as a treatment for depression, while 5-hydroxytryptophane has been reported to be of value in the treatment of schizophrenia. Many investigators have postulated that abnormalities in the metabolism of tryptophane or 5-hydroxytryptamine are the cause of affective disorders or schizophrenia. Wurtman and Fernstrom's article in the current volume on the role of tryptophane in the control of brain amine synthesis is an important new chapter in understanding how amine synthesis is controlled.

Thoenen's article on 6-hydroxydopamine will help in the critical evaluation of Stein's recent proposal that 6-hydroxydopamine is the endogenous toxin that causes schizophrenia and perhaps mania and depression as well. The article by Hertting and Suko and that by Glowinski present important new concepts and data that will assist the reader in evaluating current variants of the catecholamine hypothesis of affective disorders and the mode of action of antidepressant drugs. Glowinski's article also cites provocative new data that the long-term effects of phenothiazines on dopamine synthesis may be to inhibit synthesis; if this is true, it would raise serious questions about current theories relating the mechanism of action of the neuroleptic drugs to blockade of dopamine receptors in the mesolimbic region and other areas of the brain. Iversen's review of GABA will be of great value in critically evaluating Eugene Robert's recent hypothesis proposing abnormality in the function of the system that utilizes GABA as a neurotransmitter in some types of schizophrenia.

If psychiatry is to continue to be rooted in the neurosciences and the medical tradition and not become totally immersed in the attempted resolution of the symptoms of social breakdown by means increasingly prescribed by nonmedical agencies, then more attention must be paid *by psychiatrists* to the type of studies reported in this excellent volume.

REFERENCE

1. Cooper JR, Bloom, Roth RH: The Biochemical Basis of Neuropharmacology. New York, Oxford University Press, 1970

HERBERT Y. MELTZER, M.D.
Chicago, Ill.

Childhood Psychopathology, *edited by Saul I. Harrison, M.D., and John F. McDermott, M.D. New York, International Universities Press, 1972, 882 pp., $20.*

This book, which is modestly subtitled "An Anthology of Basic Readings," may not have been intended as a comprehensive text. Nonetheless, its usefulness equals or surpasses that of most other current textbooks of childhood psychopathology. It is excellent for several reasons: It encompasses a wide range of clinical entities, it presents a diversity of viewpoints, and its individual chapters (articles culled from the literature of the 1940s, 1950s, and early to mid-1960s) are well written, informative, and always thought provoking.

The unifying theme of this book is that developmental concepts and data are essential to understanding psychopathology in childhood. The contents are grouped into nine sections: Development, Developmental Disorders, Neurotic Disorders, Learning Disorders, Antisocial Disorders, Psychophysiologic Disorders, Childhood Psychosis, Mental Retardation, and Brain Dysfunction. Many old favorites will delight the reader, including such classics as "Eight Ages of Man" by Erikson, "Hospitalism" by Spitz, "Underlying Causes of Delinquency" by Aichhorn, "Early Infantile Autism" by Kanner and Lesser, and "Effects of Adoption on Children from Institutions" by Skeels, to name only a few. While one might question the temerity of any editor who would attempt to encompass Piaget within the confines of two short chapters, the article titled "The Stages of the Intellectual Development of the Child" by Piaget is about as neat a presentation of the clinically relevant aspects of Piagetian cognitive theory as I have seen to date. It should

certainly stimulate the reader to investigate Piaget's writings in greater detail if he has not already done so.

The usefulness of the book has been enhanced by inclusion of a comprehensive subject index.

Childhood Psychopathology can be recommended to psychiatric teachers as a source of background readings for seminars and courses and to experienced clinicians who wish to have a collection of the "oldies and goodies" conveniently on their bookshelf. It can also be recommended to trainees, with one important caveat. The trainee who uses this text must be prepared to expand his understanding of the various topics by consulting recent review articles such as can be located through the *Bibliography of Medical Reviews* (1), published annually by the National Library of Medicine. While Harrison and McDermott have provided introductory and interstitial commentaries of a perceptive nature, these do not always bring the reader fully up-to-date. There are all too few references to articles published since 1966, so on the subject of early infantile autism, for instance, the student could be left with the impression that environmental factors play a primary role in the development of this syndrome, a concept that would be seriously at variance with recent literature on the subject.

There is an added bonus for all who purchase this text. Given that most of its selections have withstood the test of time, the shelf life of *Childhood Psychopathology* should be at least double or triple that of most textbooks.

REFERENCE

1. Bibliography of Medical Reviews, Cumulated Index Medicus. Bethesda, Md, National Institutes of Health, National Library of Medicine

PETER E. TANGUAY, M.D.
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Psychiatric Diagnosis in New York and London: A Comparative Study of Mental Hospital Admissions, *by J.E. Cooper, D.P.M., R.E. Kendell, M.D., D.P.M., B.J. Gurland, D.P.M., L. Sharpe, M.B., D.P.M., J.R.M. Copeland, D.P.M., and R. Simon, M.A. Institute of Psychiatry, Maudsley Monographs, no. 20. New York, Oxford University Press, 1972, 145 pp., $12.50.*

This investigation, which was carried out under the aegis of a distinguished group, deserves worldwide attention from those concerned with a better understanding of psychiatric illness. The project's aim was to elucidate the reason for the differences between the diagnostic statistics that had been noted between the United States and Great Britain and to determine whether these variations were due to differences in the clinical characteristics of the patients or to differences in the diagnostic criteria used by the psychiatrists. After a survey of the common pitfalls in making comparisons of psychiatric illness in different areas, a research design was critically formulated and perceptively carried out.

In the first part of the study a comparison was made of 250 patients, aged 20 to 59, in each of two hospitals representative of their groups—a state hospital in New York and an English area hospital. A further comparison was made between 192 patients drawn from the nine state hospitals used by New York City and 174 patients from nine area hospitals in London.

Every patient was examined shortly after admission by a project psychiatrist and, independently, by a hospital psychiatrist. Mental state and history interviews and diagnostic criteria were standardized for the project teams, who trained together for several weeks in the use of the methodology. Periodic exchange of staff between New York and London kept the two teams in constant contact. Testing of consistency indicated a satisfactory reliability among the project psychiatrists.

There were striking differences in the incidence of diagnoses made by the hospital psychiatrists in the two cities. The most important difference was the higher incidence of schizophrenia in New York. This was due to the fact that the American concept of this illness is broader than it is in England, so that many patients diagnosed as having schizophrenia by American hospital psychiatrists would be considered by the British to have depressive illness, neuroses, personality disorders, or mania. In contrast, comparisons of the diagnoses by the project psychiatrists indicated that if the alcoholics and drug addicts, who were much more common in New York than in London, were omitted from both series and the remaining patients compared, there were no longer any significant differences. Instead, there was such a remarkable similarity that the diagnostic distributions of the patients entering the hospital in the two cities were, to all intents and purposes, identical.

It is concluded that the large, consistent differences between American and British hospital diagnostic statistics are largely spurious. The wide variation in use of terms, not only between countries but between sections of a country and even between hospitals within a small area, is also discussed. A plea for a universal, standardized system of patient examination and criteria for classification of psychiatric illness is convincingly presented. Only with uniformity will we be able to communicate more effectively in regard to our clinical findings and research. Agreement on terminology also will have broad implications for testing current etiological theories, whether they be social, psychological, or genetic.

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Modern Synopsis of *Comprehensive Textbook of Psychiatry,* by *Alfred M. Freedman, M.D., Harold I. Kaplan, M.D., and Benjamin J. Sadock, M.D. Baltimore, Williams & Wilkins Co., 1972, 800 pp., £15.95 (paper).*

Six years ago Freedman and Kaplan edited one of the most comprehensive textbooks of psychiatry ever published in this country (1). The present volume, listed as a "modern synopsis" of the king-size 1967 book, is not a breezy summary but is actually of sufficient dimension to present psychiatry in the round. It is not offered as a how-to-do-it manual. Thus it includes an interesting and reasonably in-depth historical background to almost every topic presented. There is something here on communication theory, the psychological basis of emotional disorders, anthropologic and sociologic factors in emotional disorders, the use of computers in psychiatry, and diverse theories of personality and psychopathology.

The book is rather heavily illustrated—an unusual feature in a psychiatric text, since the subject doesn't usually lend itself to pictures. One wonders, indeed, whether some of the illustrations are worth the space; and it is difficult to see how they contribute to the learning experience of the medical student or psychiatric resident.

The usual clinical syndromes are presented concisely and, in many chapters, rather leanly. For example, in this 800-page book, only 37 pages are allotted to the chapter on the neuroses. The book covers a wide arena, including an extensive section on child psychiatry (with an ingenious chart comparing *DSM-I* [2] with the current *DSM-II* [3] and some thoughts on community psychiatry, geriatrics, the possibilities and methods of

preventing mental illness, on retardation, and psychiatric emergencies.

In the net, this shapes up as a handy volume. Although it is aimed at medical students and residents, it is also a usable work for psychiatric practitioners. What it lacks in not offering the crispness of the ABC blueprint it makes up for in providing the reader with thought-provoking material that really does illustrate the breadth and depth of our specialty.

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2. American Psychiatric Association: Diagnostic and Statistical Manual, Mental Disorders. Washington, DC, APA, 1952
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HENRY A. DAVIDSON, M.D.
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Psychology in Medicine, *by J.E. Orme, Ph.D., and F.G. Spear, M.D., D.P.M. Baltimore, Williams & Wilkins Co. (U.S. publisher), 1972, 211 pp., no price listed (paper).*

Jointly written by a clinical psychologist and a psychiatrist, this book is intended as an overview of psychological facts that will be useful to the physician, the medical student, and the psychology student in the early stages of graduate training. It seeks to scan a variety of psychological theories, techniques, and research findings, but with a greater practical emphasis than is found in the conventional introductory psychology textbook. The material presented is often tied to psychopathology, somatic phenomena, and diagnostic issues.

A number of the chapters are introduced within the framework of specific kinds of questions the psychiatrist is likely to ask of the psychologist when referring a patient for psychological testing. There are descriptions of the state of the art with reference to using psychological tests to evaluate intellectual functioning, the presence of brain damage, personality pathology, and trait attributes. The writers are English, and so they slant their discussions of psychological tests in the direction of those presently most popular in English circles. This may be a good corrective experience for those of us who live in the United States and tend to become provincially invested in our own native techniques.

Succinct descriptions are also provided of some of the major therapeutic approaches. There are reviews of behavior, group, suggestion, and physical therapies. These descriptions are direct and factual. They exemplify the excellent, no-nonsense level of communication that characterizes this book throughout. What comes through in all of the presentations is the intent to be fair and to avoid extreme positions. There is skepticism about pure clinical intuition but also sympathy for the complex problems facing the clinician.

Incidentally, an appendix is included that summarizes a number of the major techniques useful in experimental design and statistical analyses.

The authors appraise recurrent problems that exist in the collaboration between psychiatrist and psychologist. They probe traditional areas of rivalry. For example, they refer to the nagging dispute about whether the psychologist is as qualified as the psychiatrist to take full responsibility for treatment. They consider areas in which the psychologist's training may better prepare him for taking on certain tasks, such as evaluation and management of the retarded or the planning of clinical research projects. They caution the psychiatrist to curb his inclination to regard the psychologist as an auxiliary technician. But they point out, too, that the psychologist is tempted to be snobbish about his greater "scientific" training. Overall, their discussion is balanced and contains useful hints about how the two disciplines can maximize their usefulness to each other.

The authors have successfully accomplished what they intended to do. One would expect the book to be especially useful in the teaching of medical students and psychiatric residents. Indeed, anyone who is interested in a broad informative sweep of what is presently known about the clinical applications of psychology will find it worthwhile.

SEYMOUR FISHER, PH.D.
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Theory and Practice of Family Psychiatry, *by John G. Howells, M.D., D.P.M. New York, Brunner/Mazel, 1971, 924pp., $25.*

This impressive compendium starts out with the statement by the editor that individual psychiatry is replaced by family psychiatry, that is, individuals are not "functioning units." Despite this sweeping introduction, Dr. Howells makes a major contribution, and a balanced one, in outlining and defining the field, and he by no means ignores the individual dimension.

The first 100 pages, and over one-tenth of the volume, are written entirely by Dr. Howells; they represent a comprehensive review of basic concepts, family dynamics, and social parameters concerning the family as well as the clinical practice of family psychiatry.

The second part, a further presentation of the same issues and problems by other authors, moves from considerations of the individual to relationships to group property and community actions. There are also chapters on material aspects of family life, again by Dr. Howells. These are republications spanning almost 20 years.

The third and last part illustrates the clinical practice of family psychiatry beginning with Howells' description of his own service and a chapter on an assessment by his collaborator, J.R. Lickorish. The rest of this section is a collection of previously published papers on clinical syndromes and therapy, except for two original papers by Spiegel and by Virginia Satir.

It is difficult to render a critical appraisal of this volume as a whole because any collection of about 50 papers by different authors must necessarily be of varying value and significance. On the whole, I could not quarrel with any particular selection, and I know of very few that were omitted or might have been included instead of some others.

It is convenient to have in one volume so many of the basic papers in the field. Included in the book are some classic contributions such as Spelt's on intrauterine conditioning, Greenacre's on the parent-infant relationship, D. Levy's study of hostility, Henry and Warson's ethological family study, Hilgard and Newman's anniversary classic, the model study of Lasko on first and second children, and Norman Bell's essay on boundaries.

Dr. Howells' own contributions are of great importance and an admirable guide to those who wish to engage in family research or become family psychotherapists. The only regrettably weak chapter is that by Lickorish, which not only reflects the uncertain methodological state of family assessment, but fails to refer to other significant efforts at such assessments, some of which are included in this volume.

Unfortunately, such a volume quickly becomes dated; and despite the erudition of Dr. Howells' chapters on the dimen-

sions of family psychiatry, more recent concepts, for instance a general systems approach, are lacking.

C. Sager's introduction to the American edition is excellent and emphasizes that family psychiatry is basic to community psychiatry..

STEPHEN FLECK, M.D.
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Shame and Guilt in Neurosis, *by Helen B. Lewis, Ph.D. New York, International Universities Press, 1971, 525 pp., $15.*

For the sake of criticism this work had best be divided into three sections. These divisions are mine, not the author's. The first and longest of these sections deals exhaustively (and sometimes exhaustingly) with various definitions, explications, and discussions of the concepts of shame and guilt. These include dictionary definitions from *Webster's* and the *Oxford English Dictionary* and the working definitions of a large number of authors who have previously written on the subject. A thorough review is made of the theories of Freud and later psychoanalysts concerning the formation of the superego structure. Strangely, little mention is made of specific kinds of parental influence that seem, to me, to foster predominance of one or the other of these complex and painful affects.

Instead, the author turns to the differentiation construct of Witkin. In this, perceptual style is measured by such methods as the rod and frame test and the embedded figure test, and ratings are made as to the degrees of field dependence and field independence. By comparing normals and clinically ill patients, Witkin and his colleagues have felt that there is definite evidence of congruence between the subject's test performance, perceptual style, personality variables other than perceptive ones, and his clinical picture: "Low self-esteem and high need for approval are characteristics which have been linked to field dependence" (p. 165).

After a discussion of the methodology the author reports a series of experiments in which patients were rated as field independent or field dependent and then were interviewed. The interview transcripts were then rated for implied verbal affect by the method of Gottschalk and Glaser, and it was shown that there were significant differences in amounts of shame and guilt affects communicated. Field-dependent patients demonstrated a preponderance of shame, while field-independent patients demonstrated more guilt. Field-dependent patients were prone to direct hostility against themselves, while field-independent patients directed their hostility outward.

In the second section the author turns to microanalysis of the patients' productions in therapy and to patient-therapist interaction. Through this examination come chapters dealing with "The Phenomenology of Shame," "The Phenomenology of By-Passed Shame," "The Phenomenology of Guilt," "Shame in the Transference," and so forth. The therapy transcripts are excellent, interesting, and sensitive and demonstrate clearly that if a therapist is alert to the manifestations of shame and guilt concealed within therapeutic communication, a new dimension can be added to understanding.

The last section contains a review of Freud's case material regarding the role of shame and symptom formation. Added to this are several case reports from the author's own therapeutic experience. In these, the author attempts to link symptom formation with shame and guilt in the patient's remote past, recent past, and in the transference. She connects these with Freud's classic statement of symptoms resulting from "strangulated affects."

The author concludes that there are intrinsic advantages in the phenomenological stance toward shame and guilt in therapy in that this stance prevents the analyst from being caught up in the patient's obsessive ruminations and also makes it easier not to take sides or be judgmental about issues in the patient's life. She seems to have demonstrated this reasonably.

The first section of the book will be of considerable interest to the experimenter in affect seeking a review of previous work done in this line. This section will be of less interest to the clinician but may spur him into an attempt at clinical research design. The second and third sections will hold more interest for the clinician in their depiction of therapeutic exchange between therapists and patients of widely different perceptual style. The bibliography is excellent, but a glaring fault is the absence of an index.

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A Guide to Behavioral Analysis and Therapy, *by Robert Paul Liberman, M.D. Elmsford, N.Y., Pergamon Press, 1972, 339 pp., $5.50 (paper).*

The last decade has seen a rapid growth of the clinical and experimental literature relating to behavior therapy (the systematic application of principles of learning to the analysis and treatment of disorders of behavior). Several excellent textbooks have been published that acquaint the clinician with this approach to assessment and provide him with a comprehensive survey of behavior therapy procedures.

The present book has a different focus. While being technically accurate, it presupposes that the reader has virtually no formal knowledge of psychiatry or clinical psychology. Hence it will be especially useful for acquainting nurses, psychiatric aides, and other workers in the mental health field with this approach to psychiatry. It will also serve as a useful introduction for psychiatrists and psychologists with no previous knowledge of behavior therapy who want a brief overview of the field. Appetite whetted, the initiated clinician might want to read heartier fare elsewhere—an annotated bibliography is provided in the book for this purpose.

The first part of the book introduces the language and methods of behavior therapy. Terms and concepts that are basic to a behavioral approach are systematically developed in the context of illustrative case material. These include such notions as reinforcement, extinction, shaping, satiation, and generalization. The reader is given practice in this section in making a psychiatric assessment in terms of specific, observable, quantifiable behavior rather than the more traditional emphasis on conflicts and personality traits.

The second part of the book describes specific behavior therapy procedures. Although only a few are given, the choices are good since they include procedures of wide application that convey the range of problems currently treated by behavior therapy. There are chapters on systematic desensitization, assertive training, the use of token economy procedures with institutionalized patients, behavioral techniques in family therapy, the treatment of schizophrenic children, and operant techniques for the improvement of children's classroom performance.

The semiprogrammed style of the presentation is both effective and instructive. Since programmed instruction makes use of several behavioral principles (e.g., shaping and reinforcement), the reader has a first-hand behavior modification experience in proceeding through the volume.

In sum, this brief book should be a useful introduction to be-

havior analysis and therapy for a wide audience of workers in the mental health field.

JOHN PAUL BRADY, M.D.
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Marital Therapy: Moral, Sociological and Psychological Factors, *edited by Hirsch Lazaar Silverman, Ph.D., Sc.D., L.H.D., LL.D. Springfield, Ill., Charles C Thomas, 1972, 527 pp., $24.75.*

It was a pleasure to review this well-edited collection of essays by a selected group of 47 contributors, many of whom are well known for their previous contributions in this field. Our patients are presenting themselves more and more with family and marital problems. Thus an awareness of the moral, sociological, and psychological factors in marriage becomes mandatory. This book consists of 43 chapters (to be referred to after this by numbers in parentheses) and is subdivided into four sections: psychological, sociological, moral, and finally, an evaluation of each chapter by the editor. There are extensive biographical notes on each of the contributors at the beginning of the book.

Many of the essays in this book fill a gap in the literature concerned with the prevention of marital problems. The first chapter, by Mary S. Calderone, and the concluding chapter, by Sister M. Catherine deRicci Killeen, both deal with sex education. Both authors stress that when we fail to attend to our children's emotional growth, we will have to worry how various stimuli may affect them. Their answer, and the answer of many of the authors in this book, is education—in the home, in the educational systems, and in religious and secular institutions. In a thoughtful essay (chapter 10) Thomas McGinnis categorizes the various organized and unorganized groups that oppose sex education and their reasons for doing so. He offers guidelines to communities on how to assess their individual situations. Ira L. Reiss (18) gives an excellent presentation of his great concern about the current direction of sex education in schools.

Robert J. Goodstein (26) provides insights, which have preventive value, into the typology of girls who are prone to premarital pregnancy. Donald D. Moore (4) coordinates the lack of sex education and unpractical morality. Patricia Schiller (22) cogently deals with her preventive efforts with teen-age pregnancies. Joseph B. Trainer (3) offers five specific ways to prevent marital problems. William F. Eastman and Clifford R. Reifler (12) discuss their experiences within a university health service. David R. Mace (14) succinctly discusses a continuum of minimum to limited to maximum modes of interpersonal involvement in the ultimate goal of prevention with group sessions of couples with stable marriages. Gerald Sanctuary (29) of Great Britain presents the experiences, especially pertinent for mental health community centers, of the selection, basic training, and in-service training procedures of volunteer workers.

A wide spectrum of therapeutic frameworks is presented by the essayists, ranging from an eclectic, interpersonal, Bernean, Heideggerian ontological, and psychoanalytic to group therapeutic setting. An interesting chapter by William L. Carrington (30) of Australia stresses five essential factors of morale necessary in counseling (marital vis-à-vis martial).

The editor's 16 chapters are devoted to sociological factors. David O. Moberg (20) beautifully presents the role of manipulation in both counseling and human behavior. Ethel M. Nash and A.E. Keir Nash (24) strongly stress the role of marriage counselors in coping with the gravity of the population explosion. (See Dr. A.B. Sabin's thought-provoking article in the October 1972 issue of the *Bulletin of the Atomic Scientists* [1].)

In the section on moral factors, clergymen and other essayists present careful deliberations that are important in the solution of marital disharmony. Professor Panos D. Bardis (15) presents an interdisciplinary, sociohistorical study of religion that combines description, theory, and quantification. Albert Ellis (5) presents his principles of morality as it pertains to relationships with others. In an excellent essay John G. Quesnell and the Reverend Paul Marx (33) discuss the basic problem facing the counselor who is working with a Catholic couple who wish to be true to their conscience, their faith, and the teachings of the encyclical *Of Human Life.*

I have found that experienced pastoral counselors are of great help when the couple wish to deal with their problem from a theological, rather than a psychiatric, point of reference. Space prevents a discussion of the other superb chapters.

This book will be a valuable addition to the library of the psychiatrist.

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Winnetka, Ill.

Science and Psychoanalysis, vol. XIX: Dream Dynamics, *edited by Jules H. Masserman, M.D. New York, Grune & Stratton, 1971, 188 pp., $13.50.*

This book is a compilation of papers presented at the 19th annual meeting of the American Academy of Psychoanalysis; it is organized around dream function, meaning, and techniques of interpretation. The contributors represent a variety of disciplines, use diverse conceptual approaches, and differ markedly in writing style. Books emanating from symposia are always uneven in their quality of information and clarity of presentation, and this one is no exception.

The sections are titled Dream Thoughts and Theories, The Dreams of Childhood, Clinical Applications, and A Dream Symposium. If the reader, particularly the clinician, approached the book with a keen anticipation that it presented a unified theory of dreaming followed by a consistent, validated system of relating dream interpretation to the psychoanalytic or psychotherapeutic process, he would close its hard cover with a resolve to cling even more tenaciously to the reporting of phenomena emerging during the conscious state. There were sharp disagreements among the contributors, but this ferment revealed some changing views on the purpose of dreaming as well as techniques for the interpretation of dreams.

The understanding of dreams as covert expressions of instinctual drives organized by wish-defense considerations no longer holds as much currency as in the past. The continuum between waking and dreaming concerns and cognitive modes was pointed out by several contributors. Indeed, the manifest content of the dream was described as having a communicative language of its own and not as a code for disguised impulses in the latent content. The dream was also viewed as a continuation of problem-solving behavior present during the day.

This notion that dreams are disguised forms of communication and wish fulfillment was challenged most effectively by Beck. In a paper of brilliant clarity, he proposed that the cognitive style of waking life is used in the dream where the same basic themes are present, albeit metaphorically. For example, depressive themes of failure, defeat, and coercion are expressed in

a comparable manner in both waking and dreaming states. Spiegel and her discussant, Salzman, extended this proposition in a paper on the dreams of obsessional patients, where issues of control, doubting, and obfuscation are evident not only in the dream itself but also in the manner in which the patient dreams to neutralize and overwhelm a therapist through frequency of presentation, enormous detail of imagery, and contentious refusal to accept their significance as a valid statement of feelings. Salzman's guide to the management of dreams in the obsessional patient is almost worth the price of the book.

Of considerable interest is the report of a series of seminars on dream interpretation conducted under the aegis of the academy. It is a description of the group dynamics of individualistic analytic practitioners engaged in a scientific project requiring the exposure to critical assessment by colleagues of a particular aspect of what they do as therapists, as well as a searching examination of how dreams are interpreted and incorporated into ongoing analytic therapy. This chapter, written by three of the participants, was an open, honest, and courageous attempt to describe the frustration, conflict, divergence of opinion and approach, and failure to reach consensus by the group. The description of the dream as art and metaphor was meaningful, and the impression was conveyed that dream interpretation by analysts in a group is comparable to achieving harmonious assessment of an abstract canvas by a group of art critics. Indeed, Bonime expressed the idea that dream interpretation, rather than being the "royal road to the unconscious," is primarily a device by which the analyst trains the patient to structure personal data to conform to the therapist's personal and theoretical beliefs.

The book is in the tradition of this distinguished academy's prior published symposia. Established dogma is challenged and examined within the framework of information and theories provided by other disciplines. This book is well worth the nonanalytic psychiatrist's time.

ELLIOT D. LUBY, M.D.
Detroit, Mich.

Psychotropic Drugs in the Year 2000: Use by Normal Humans, *compiled and edited by Wayne O. Evans, Ph.D., and Nathan S. Kline, M.D. Springfield, Ill., Charles C Thomas, 1971, 158 pp., $7.75.*

The papers in this volume were presented at the annual meeting of the American College of Neuropsychopharmacology in 1967. The editors state that their aim in publishing them is to draw the attention of the public to the varieties of mind-affecting chemical substances that can be produced and to the many questions of responsibility that the creation and use of these substances involve. This modest goal is of course achieved.

However, the title of the book seems to promise something more. It suggests than an effort will be made to anticipate how the lives of normal individuals will be influenced by chemical substances in the future. This type of projection has value if it succeeds in identifying long-term trends that are lost sight of in the immediacy of short-term pressures or if it generates new concepts that can be used in directing our professional energies.

Few of the papers rise above unimaginative extrapolations of current clichés. Kline, the old master of the innovative breakthrough, does suggest a number of different and unconventional ways of influencing life. "It is not," he says, "equipment and techniques but conceptualizations which are really most basic to change." He offers as an aphorism, "Today's side effects are tomorrow's therapy." Heinz Lehmann, too, exhibits some originality in his discussion of the possible approaches to the alleviation of the hardships of old age.

The idea of using chemical substances to intensify and protract pleasurable sensations and to obliterate the anguish of daily life troubles me. Perhaps it is because I have made my peace with the current realities of life by considering disappointment and suffering likely, and pleasure an occasional respite. But I prefer to think that any change in the pain/pleasure ratio, in family life and social existence, cannot be considered apart from the influences it exerts upon that organization. Effective aphrodisiacs, it could be argued, can contribute as much to the reinforcement of the traditional marriage tie as to the promotion of adolescent promiscuity. But in practice how can we anticipate what its effect will be? And is not making sensuality rather than restraint the basis of social existence actually the idol worship of the Bible, which usually brings a prosperous civilization to its end?

All the writers seem to accept the principle that physicians are obligated to increase pleasure and alleviate distress. There is a real difference between this principle as a value and the value of healing the ill. Not all distress arises from illness, and a good measure of stress seems to be necessary for the vigor of every society and every species. Mr. John Campbell, editor of *Analog Science Fiction* and a discussion panelist at this meeting, is the only participant who takes notice of this.

Evans and Kline and a few others do assert that the serious problem of psychopharmacology concerns who should make the decisions to apply the agents, upon whom, and under what circumstances. Yet these statements lead to no serious consideration of the problem. Similarly, despite occasional notes that drugs which exert one desirable action may bring about compensatory and undesired reactions, this problem is not seriously considered.

Finally, I have yet to be persuaded that the effects of psychomimetic drugs are anything other than illusions born of drug delirium. I can accept the claim of Kurland, Pahnke, Unger, Savage, and Grof (in the only clinical paper in the volume) that controlled use of LSD in a therapeutic setting can alleviate anguish. But I have encountered no serious evidence that anything creative or constructive has been achieved. Many psychiatrists accept the claim of some of those who have used these drugs that they obtained "new knowledge" which can solve problems. Even our more conservative colleagues, such as those represented in this book, speak respectfully of these claims. I would like to see our profession take the more forthright stand that hallucinogenic drugs generate hallucinations and illusions. They can create euphorias of various qualities and temporary changes in personality, some of which may even be welcome. But their mode of action is disintegrating rather than integrating, and limiting rather than enriching.

MORTIMER OSTOW, M.D.
Riverdale, N.Y.

This Month's Reviewers

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Books Received

This listing acknowledges the receipt of recent books. Books of particular interest to the readers of this journal will be reviewed as space permits, and copies of the reviews will be sent to the publishers. Books cannot be returned to the publishers.

Eidetic Parents Test and Analysis, *by Akhter Ahsen, Ph.D. New York, Brandon House, 1972, 246 pp., $17.50.*

Computer Glossary for Medical and Health Sciences, *by William T. Blessum, M.D., and Charles J. Sippl. New York, Funk & Wagnalls, 1973, 262 pp., $6.95.*

The Manipulator: A Psychoanalytic View, *by Ben Bursten, M.D. New Haven, Conn., Yale University Press, 1973, 267 pp., $10.*

Human Ageing, *edited by Sheila M. Chown. Baltimore, Penguin Books, 1973, 380 pp., $3.95 (paper).*

Community Mental Health: Social Action and Reaction, *edited by Bruce Denner and Richard H. Price. New York, Holt, Rinehart and Winston, 1973, 359 pp., no price listed (paper).*

The Psychoanalytic Study of the Child, vol. 27, *edited by Ruth S. Eissler, M.D., Anna Freud, LL.D., D.Sc., M.D., Marianne Kris, M.D., and Albert J. Solnit, M.D. New York, Quadrangle Books, 1973, 641 pp., $12.50.*

Handbook of Abnormal Psychology, 2nd ed., *edited by H.J. Eysenck, Ph.D., D.Sc. New York, Pitman Publishing Corp., 1973, 861 pp., £20.*

Zwang und Schizophrenie, *by Hans Feer. New York, S. Karger, 1973, 108 pp., $12.60 (paper).*

Try Being Human, *by Alec Forbes. Berkhamsted, Hertfordshire, England, Langdon Books, 1973, 89 pp., £1.80 (paper).*

Interviewing: Its Principles and Methods, 2nd ed., *by Annette Garrett, revised by Elinor P. Zaki and Margaret M. Mangold. New York, Family Service Association of America, 1972, 209 pp., $3.95 (paper).*

The School We Have, *by Shepard Ginandes, M.D. New York, Delacort Press/Seymour Lawrence, 1973, 273 pp., $7.95.*

Characteristics of NARA Patients in Aftercare During June 1971, *by Ron Gold and Lois R. Chatham, Ph.D. Rockville, Md., Narcotic Addict Rehabilitation Branch, Division of Narcotic Addiction and Drug Abuse, National Institute of Mental Health, 1973, 35 pp., no price listed (paper).*

Mental Development Evaluation of the Pediatric Patient, *by Lawrence C. Hartlage, Ph.D., and David G. Lucas, M.A. Springfield, Ill., Charles C Thomas, 1973, 75 pp., $6.50.*

Feminine Psychology, *by Karen Horney, M.D., edited by Harold Kelman, M.D. New York, W.W. Norton & Co., 1973, 258 pp., $2.95 (paper).*

Males and Females, *by Corinne Hutt. Baltimore, Penguin Books, 1973, 150 pp., $2.45 (paper).*

Out of the Closets: Voices of Gay Liberation, *edited by Karla Jay and Allen Young. New York, Overlord-Krishna & Schaffer, 1972, 403 pp., $7.95.*

Transcultural Psychiatry, *by Ari Kiev. Harmondsworth, Middlesex, England, Penguin Books, 1973, 240 pp., 75 p (paper).*

The Right To Be Different: Deviance and Enforced Therapy, *by Nicholas N. Kittrie. Baltimore, Penguin Books, 1973, 434 pp., $2.25 (paper).*

The Crisis Team: A Handbook for the Mental Health Professional, *by Julian Lieb, M.B., Ian I. Lipsitch, M.D., and Andrew Edmund Slaby, M.D. New York, Harper & Row, 1973, 177 pp., $6.96 (paper).*

Autogenic Therapy, vol. 6: Treatment with Autogenic Neutralization, *by Wolfgang Luthe, M.D. New York, Grune & Stratton, 1973, 425 pp., $9.75.*

Man & Woman, Boy & Girl: The Differentiation and Dimorphism of Gender Identity from Conception to Maturity, *by John Money and Anke A. Ehrhardt. Baltimore, Johns Hopkins Press, 1973, 292 pp., $12.50.*

Autobiography of a Thief, *by Andrew Keith Munro. Levittown, N.Y., Transatlantic Arts (U.S. distributor), 1973, 155 pp., no price listed.*

Getting There Without Drugs, *by Buryl Payne. New York, Viking Press, 1973, 204 pp., $7.95.*

The Collected Works of C.G. Jung, vol. 2: Experimental Researches. Bollingen Series XX, *edited by Sir Herbert Read, Michael Fordham, M.D., Gerhard Adler, Ph.D., and William McGuire, translated by Leopold Stein in collaboration with Diana Riviere. Princeton, N.J., Princeton University Press, 1973, 627 pp., $17.50.*

Man's Aggression: The Defense of the Self, *by Gregory Rochlin, M.D. Boston, Gambit, 1973, 287 pp., $8.95.*

Psychotherapy of Schizophrenia, *edited by David Rubinstein, M.D., and Yrjö O. Alanen, M.D. Amsterdam, Excerpta Medica, 1973, 338 pp., $29.*

Communicational Structure: Analysis of a Psychotherapy Transaction, *by Albert E. Scheflen, M.D. Bloomington, Indiana University Press, 1973, 378 pp., $15.*

Anger: Psychology, Physiology, Pathology, *by Frederic R. Stearns, M.D. Springfield, Ill., Charles C Thomas, 1973, 66 pp., $6.50.*

Principles of Human Genetics, 3rd ed., *by Curt Stern. San Francisco, W.H. Freeman and Co., 1973, 872 pp., $13.95.*

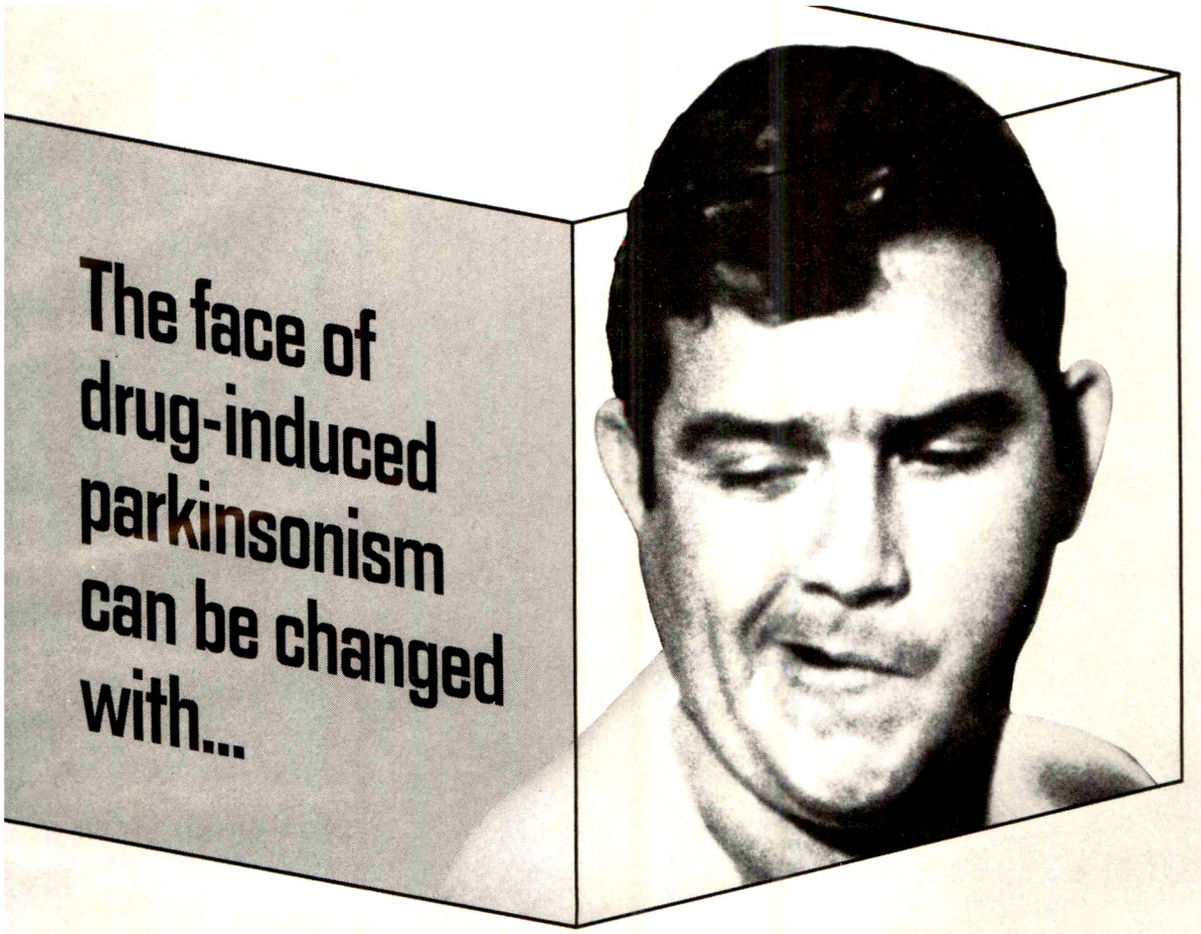
C.G. Jung, *by Anthony Storr. New York, Viking Press, 1973, 111 pp., $5.95.*

Clinical Studies in Psychiatry, *by Harry Stack Sullivan, M.D., edited by Helen Swick Perry, Mary Ladd Gawel, and Martha Gibbon. New York, W.W. Norton & Co., 1973, 378 pp., $3.65 (paper).*

A Primer of Misbehavior: An Introduction to Abnormal Psychology (reprint), *by George R. Wesley, Ph.D. Totowa, N.J., Littlefield, Adams & Co., 1973, 196 pp., $2.50 (paper).*

Atlas of the Massachusetts Department of Mental Health, 1972, *compiled and edited by Margo Withy. Boston, Mass., Department of Mental Health, 1973, 70 pp., no price listed (paper).*

Children of the Rich, *by Burton N. Wixen, M.D. New York, Crown Publishers, 1973, 209 pp., $5.95.*



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10 mg (blue)



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INJECTION
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Warnings: May block the antihypertensive action of guanethidine or similarly acting compounds. Should be used with caution in patients with a history of seizures or urinary retention, or with angle-closure glaucoma or increased intraocular pressure. Patients with cardiovascular disorders should be watched closely; arrhythmias, sinus tachycardia, and prolongation of the conduction time have been reported, particularly with high doses; myocardial infarction and stroke have been reported with drugs of this class. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. May impair mental and/or physical abilities required for performance of hazardous tasks, such as operating machinery or driving a motor vehicle. Safe use during pregnancy and lactation has not been established; in pregnant patients, nursing mothers, or women who may become pregnant, weigh possible benefits against possible hazards to mother and child.

Precautions: Schizophrenic patients may develop increased symptoms of psychosis; patients with paranoid symptomatology may have an exaggeration of such symptoms; manic depressive patients may experience a shift to the manic phase. In these circumstances, the dose of amitriptyline HCl may be reduced or a major tranquilizer, such as perphenazine, may be administered concurrently.

When given with anticholinergic agents or sympathomimetic drugs, close supervision and careful adjustment of dosages are required. Use cautiously in patients receiving large doses of ethchlorvynol, since transient delirium has been reported on concurrent administration. May enhance the response to alcohol and the effects of barbiturates and other CNS depressants. The possibility of suicide in depressed patients remains during treatment and until significant remission occurs; this type of patient should not have easy access to large quantities of the drug. Concurrent electroshock therapy may increase the hazards associated with such therapy; such treatment should be limited to patients for whom it is essential. When possible, discontinue the drug several days before elective surgery. Both elevation and lowering of blood sugar levels have been reported.

Adverse Reactions: *Note:* Included in this listing are a few adverse reactions not reported with this specific drug. However, pharmacological similarities among the tricyclic antidepressant drugs require that each reaction be considered when amitriptyline is administered. *Cardiovascular:* Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus. *Anticholinergic:* Dry mouth, blurred vision, disturbance of accommodation, constipation, paralytic ileus, urinary retention, dilatation of urinary tract. *Allergic:* Skin rash, urticaria, photosensitization, edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis, leukopenia, eosinophilia, purpura, thrombocytopenia. *Gastrointestinal:* Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, parotid swelling, black tongue. *Endocrine:* Testicular swelling and gynecomastia in the male, breast enlargement and galactorrhea in the female, increased or decreased libido, elevation and lowering of blood sugar levels. *Other:* Dizziness, weakness, fatigue, headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, drowsiness, jaundice, alopecia. *Withdrawal Symptoms:* Abrupt cessation of treatment after prolonged administration may produce nausea, headache, and malaise; these are not indicative of addiction.

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☐ **RELIGIOUS EXPERIENCE: Its Nature and Function in the Human Psyche. The First John G. Finch Symposium on Psychology and Religion** *by* **Walter Houston Clark, H. Newton Malony, James Daane** *and* **Alan R. Tippett.** *Foreword by* **Lee Edward Travis.** The roots of religion are not in growths of church, belief, or ethics, but in religious experience. The text shows that properly directed, profound religious experiences are potent sources of personality change. References are made to case illustrations. *'72, 168 pp., 1 il., $7.95*

☐ **CRISIS CENTER/HOTLINE: A Guidebook to Beginning and Operating** *edited by* **Ursula Delworth, Edward H. Rudow** *and* **Janet Taub.** *All of Colorado State Univ., Fort Collins. Foreword by* **Western Morrill.** *(12 Contributors)* Presented in a general manner, providing useful information about the day-to-day operation of a crisis center. Insights and experiences by both professionals and volunteer students are included, thus providing a model for the inclusion of paraprofessionals in the mental health field. *'72, 160 pp., $9.75*

☐ **THE THEORY AND PRACTICE OF PSYCHOTHERAPY WITH SPECIFIC DISORDERS** *edited by* **Max Hammer,** *Univ. of Maine, Orono. (10 Contributors)* Provides psychotherapists with exposure to the newest and most effective approaches today. Case illustrations are amply and appropriately supplied. Areas rarely discussed in psychotherapy books are included. A chapter is devoted to establishing some basic criteria for an effective therapeutic process. Offers new interpretations and theoretical discussions. *'72, 464 pp., $16.75*

☐ **THE MECHANISMS OF CONDITIONED BEHAVIOR: A Critical Look at the Phenomena of Conditioning** *by* **Wanda Wyrwicka,** *Univ. of California, Los Angeles.* This study analyzes the well-known data as well as new findings in conditioning experiments and interprets them from a new point of view. The role of such factors in conditioning as time intervals, sequence of stimuli, permanent environmental features, and a possible mechanism of formation of the conditioned neural pattern are thoroughly discussed. *'72, 192 pp., 16 il., 2 tables, $11.50*

☐ **PRACTICAL PROBLEMS OF A PRIVATE PSYCHOTHERAPY PRACTICE** *compiled and edited by* **George D. Goldman** *and* **George Stricker,** *both of Adelphi Univ., Garden City, New York. (14 Contributors)* '72, 300 pp., 6 il., 3 tables, $11.50

☐ **MENTAL HEALTH SERVICES FOR THE MENTALLY RETARDED** *edited by* **Elias Katz,** *Univ. of California, San Francisco. (19 Contributors)* '72, 292 pp., 4 il., $12.75

☐ **DRUG ABUSE: Current Concepts and Research** *compiled and edited by* **Wolfram Keup,** *State Univ. of New York Downstate Medical Center, Brooklyn. (70 Contributors)* '72, 496 pp., 20 il., 93 tables, $19.50

☐ **PETS AND HUMAN DEVELOPMENT** *by* **Boris M. Levinson,** *Yeshiva Univ., New York.* '72, 256 pp., 13 tables, $10.50

☐ **EVALUATION AND MANAGEMENT OF THE VIOLENT PATIENT: Guidelines in the Hospital and Institution** *by* **John R. Lion,** *Univ. of Maryland School of Medicine, Baltimore.* '72, 88 pp., $6.00

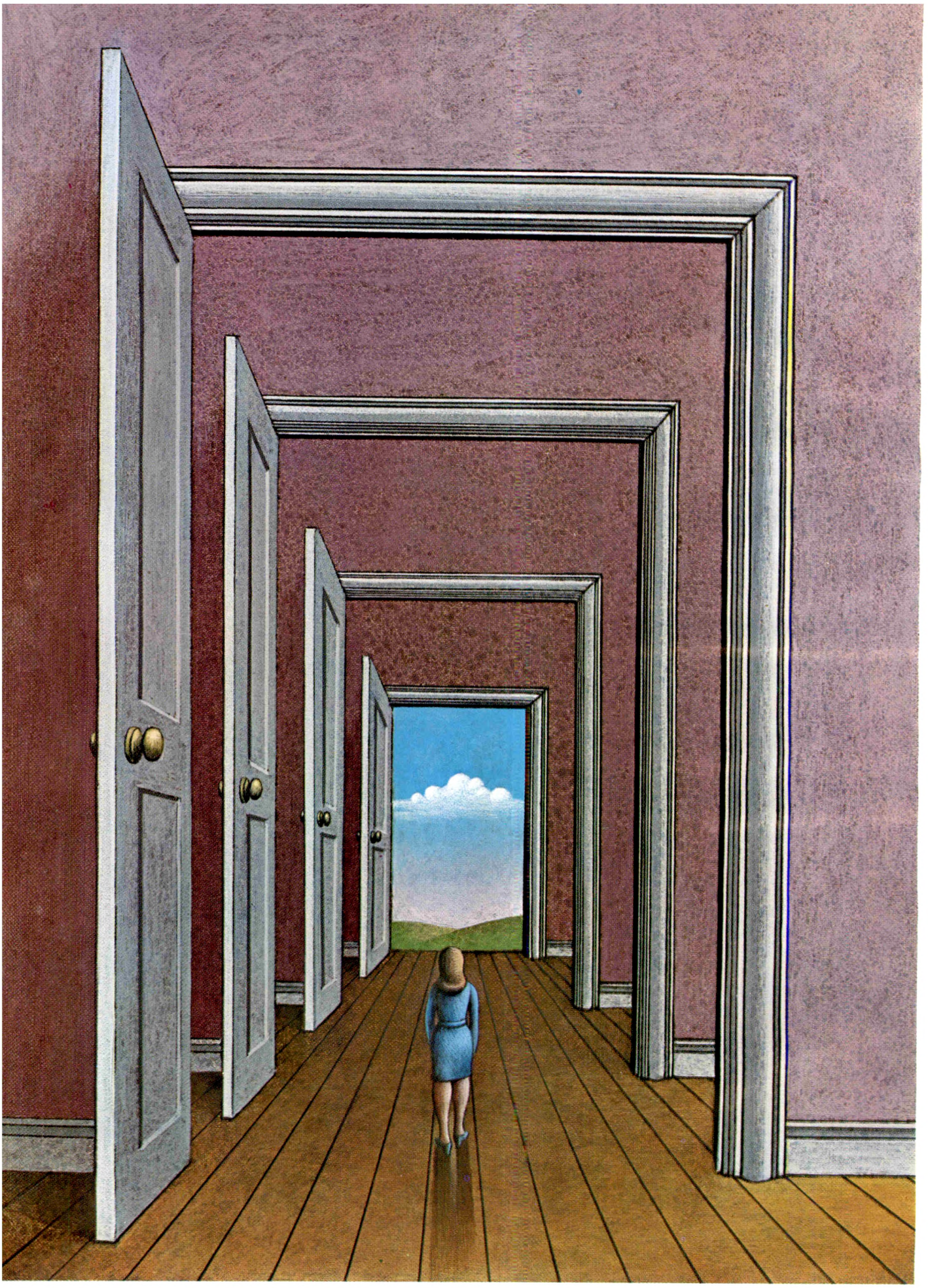
☐ **THE GENETIC, METABOLIC AND DEVELOPMENTAL ASPECTS OF MENTAL RETARDATION** *edited by* **Robert F. Murray, Jr.** *and* **Pearl Lockhart Rosser,** *both of Howard Univ. College of Medicine, Washington, D. C. Foreword by* **Roland B. Scott.** *(26 Contributors)* '72, 366 pp., 65 il., 15 tables, $16.75

☐ **LAW, LANGUAGE AND COMMUNICATION** *by* **Walter Probert,** *Univ. of Florida, Gainesville. Foreword by* **Harold D. Lasswell.** '72, 408 pp., 10 tables, $13.50

☐ **THE LSD CONTROVERSY: An Overview** *by* **Maurice S. Tarshis,** *Formerly, Alcohol and Drug Section, Mental Health Division, State of Oregon. Foreword by* **Herman A. Dickel.** '72, 96 pp., 1 il., 2 tables, $6.50

☐ **UNDERSTANDING THROUGH COMMUNICATION: Structured Experiments in Self-Exploration** *by* **Lois Timmins,** *Timberlawn Psychiatric Hospital, Dallas. Foreword by* **Howard M. Burkett.** '72, 336 pp., $11.75

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Prompt sedative activity. Marked antianxiety activity. Low incidence of cardiovascular side effects.

It's a head start for the clinically depressed patient.

THE NEWEST TRICYCLIC ANTIDEPRESSANT— WITH DIFFERENCES YOU CAN SEE.

Sinequan®
DOXEPIN HCl
25-mg. and 50-mg. capsules

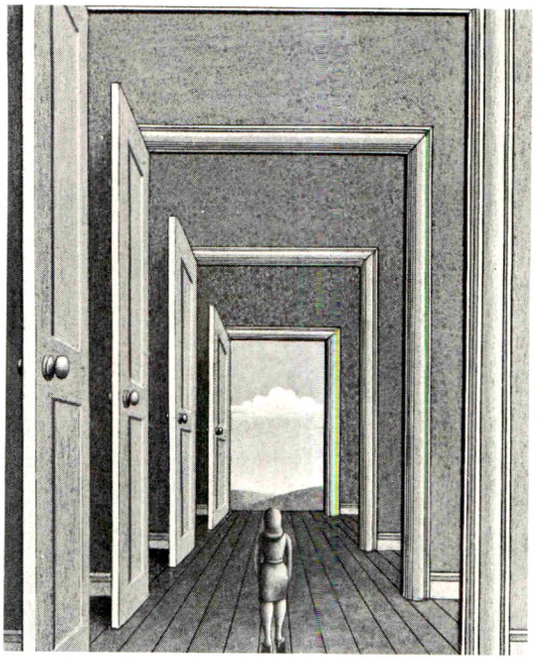
Pfizer **LABORATORIES DIVISION**
PFIZER INC.

(See Brief Summary on following page for information on adverse reactions, contraindications, warnings and precautions.)

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Sinequan®
DOXEPIN HCl
25-mg. and 50-mg. capsules

THE NEWEST TRICYCLIC ANTIDEPRESSANT—WITH DIFFERENCES YOU CAN SEE.



BRIEF SUMMARY

Sinequan® (doxepin HCl) **Capsules**

Contraindications. Sinequan (doxepin HCl) is contraindicated in individuals who have shown hypersensitivity to the drug.

Sinequan (doxepin HCl) is contraindicated in patients with glaucoma or a tendency to urinary retention.

Warnings. *Usage in Pregnancy:* Sinequan (doxepin HCl) has not been studied in the pregnant patient. It should not be used in pregnant women unless, in the judgment of the physician, it is essential for the welfare of the patient, although animal reproductive studies have not resulted in any teratogenic effects.

Usage in Children: The use of Sinequan (doxepin HCl) in children under 12 years of age is not recommended, because safe conditions for its use have not been established.

MAO Inhibitors: Serious side effects and even death have been reported following the concomitant use of certain drugs with MAO inhibitors. Therefore, MAO inhibitors should be discontinued at least two weeks prior to the cautious initiation of therapy with Sinequan (doxepin HCl). The exact length of time may vary and is dependent upon the particular MAO inhibitor being used, the length of time it has been administered, and the dosage involved.

Precautions. Since drowsiness may occur with the use of this drug, patients should be warned of that possibility and cautioned against driving a car or operating dangerous machinery while taking this drug.

Patients should also be cautioned that their response to alcohol may be potentiated.

Since suicide is an inherent risk in any depressed patient and may remain so until significant improvement has occurred, patients should be closely supervised during the early course of therapy.

Although Sinequan (doxepin HCl) has significant tranquilizing activity, the possibility of activation of psychotic symptoms should be kept in mind.

Other structurally related psychotherapeutic agents (e.g., iminodibenzyls and dibenzocycloheptenes) are capable of blocking the effects of guanethidine and similarly acting compounds in both the animal and man. Sinequan (doxepin HCl), however, does not show this effect in animals. At the usual clinical dosage, 75 to 150 mg. per day, Sinequan (doxepin HCl) can be given concomitantly with guanethidine and related compounds without blocking the antihypertensive effect. At doses of 300 mg. per day or above, Sinequan (doxepin HCl) does exert a significant blocking effect. In addition, Sinequan (doxepin HCl) was similar to the other structurally related psychotherapeutic agents as regards its ability to potentiate norepinephrine response in the animal. However, in the human this effect was not seen. This is in agreement with the low incidence of the side effect of tachycardia seen clinically.

Adverse Reactions. *Anticholinergic Effects:* Dry mouth, blurred vision, and constipation have been reported. They are usually mild, and often subside with continued therapy or reduction of dose.

Central Nervous System Effects: Drowsiness has been observed. This usually occurs early in the course of treatment, and tends to disappear as therapy is continued.

Cardiovascular Effects: Tachycardia and hypotension have been reported infrequently.

Other infrequently reported side effects include extrapyramidal symptoms, gastrointestinal reactions, secretory effects such as increased sweating, weakness, dizziness, fatigue, weight gain, edema, paresthesias, flushing, chills, tinnitus, photophobia, decreased libido, rash, and pruritus.

Dosage. For most patients with illness of mild to moderate severity, a starting dose of 25 mg. t.i.d. is recommended. Dosage may subsequently be increased or decreased at appropriate intervals and according to individual response. The usual optimum dose range is 75 mg./day to 150 mg./day.

In more severely ill patients an initial dose of 50 mg. t.i.d. may be required with subsequent gradual increase to 300 mg./day if necessary. Additional therapeutic effect is rarely to be obtained by exceeding a dose of 300 mg./day.

In patients with very mild symptomatology or emotional symptoms accompanying organic disease, lower doses may suffice. Some of these patients have been controlled on doses as low as 25-50 mg./day.

Although optimal antidepressant response may not be evident for two to three weeks, antianxiety activity is rapidly apparent.

Supply. Sinequan (doxepin HCl) is available as capsules containing doxepin HCl equivalent to 10 mg., 25 mg., and 50 mg. of doxepin in bottles of 100 and 1000.

More detailed professional information available on request.

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y ALLEN J. ENELOW, M.D., *Pacific Medical Center,* nd SCOTT N. SWISHER, M.D., *Michigan State Univerty College of Human Medicine.* "The book deals extensive- with interviewing technique, with patient resistances, hysician hang-ups, doctor-patient relationships, social roles nd social setting. . . . It is well written, clear, concise, nd readily understood, with very little jargon. It is aimed medical students, for all of whom it should be required eading, but even a Fellow of the American College of hysicians could gain a great deal from its study."—Villiam A. Steiger, M.D., in *Annals of Internal Medicine*

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Behavior Modification of the Mentally Retarded

Edited by TRAVIS THOMPSON, *University of Minnesota, and* JOHN GRABOWSKI, *University of Southern California.* "This book will be of interest to psychiatrists and other physicians on two accounts. First, it offers a brief introduction to behavior modification—the application of principles of learning to the analysis and modification of problems and behavior. Second, the book illustrates the power and utility of this therapeutic approach by describing its application in one clinical setting—an institution for the mentally retarded. . . . In a quiet way, it seems to me, this book is inspirational as well as instructive."—John Paul Brady, M.D., in *Medical World News*

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The Genetics of Mental Disorders

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Effective Management of Psychotic Symptoms

- Calms hyperactive behavior
- Controls hostility
- Decreases delusions, auditory and visual hallucinations
- Allays underlying fear, anxiety and tension
- Lessens unusual thought content, paranoid ideation
- Reduces emotional withdrawal

Before prescribing, see complete prescribing information including dosage and symptoms and treatment of overdosage, in SK&F literature or *PDR*.

Indications
Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: For the management of manifestations of psychotic disorders.

Probably effective: For control of the manifestations of manic-depressive illness (manic phase). For the control of moderate to severe agitation, hyperactivity or aggressiveness in disturbed children.

Possibly effective: For control of excessive anxiety, tension and agitation as seen in neuroses.

Final classification of the less-than-effective indications requires further investigation.

Contraindications: Comatose states, presence of large amounts of C.N.S. depressants, or bone marrow depression.

Warnings: Avoid using in patients hypersensitive (e.g., blood dyscrasia, jaundice) to any phenothiazine. Caution patients about activities requiring alertness (e.g., operating vehicles or machinery), especially during the first few days' therapy. Avoid concomitant use with alcohol. May counteract antihypertensive effect of guanethidine and related compounds.

Use in pregnancy only when essential. There are reported instances of jaundice or prolonged extrapyramidal signs in newborn whose mothers had received chlorpromazine.

Precautions: Use cautiously in persons with cardiovascular, liver or chronic respiratory disease, or with acute respiratory infections. Due to cough reflex suppression, aspiration of vomitus is possible. May prolong or intensify the action of C.N.S. depressants, organophosphorus insecticides, heat, atropine and related drugs. (Reduce dosage of concomitant C.N.S. depressants.) Anticonvulsant action of barbiturates is not intensified. Antiemetic effect may mask signs of toxic drug overdosage or physical disorders. Discontinue high-dose, long-term therapy gradually.

Patients on long-term therapy, especially high doses, should be evaluated periodically for possible adjustment or discontinuance of drug therapy.

Adverse Reactions: Drowsiness, cholestatic jaundice, agranulocytosis, eosinophilia, leukopenia, hemolytic anemia, thrombocytopenic purpura and pancytopenia; postural hypotension, tachycardia, fainting, dizziness and, occasionally, a shock-like condition; reversal of epinephrine effects; EKG changes have been reported, but relationship to myocardial damage is not confirmed; neuromuscular (extrapyramidal) reactions; pseudoparkinsonism, motor restlessness, dystonias, persistent tardive dyskinesia, hyperreflexia in the newborn; psychotic symptoms, catatonic-like states, cerebral edema; convulsive seizures; abnormality of the cerebrospinal fluid proteins; urticarial reactions and photosensitivity, exfoliative dermatitis, contact dermatitis; lactation and breast engorgement (in females on large doses), false positive pregnancy tests, amenorrhea, gynecomastia; hyperglycemia, hypoglycemia, glycosuria; dry mouth, nasal congestion, constipation, adynamic ileus, urinary retention, miosis, mydriasis; after prolonged substantial doses, skin pigmentation, epithelial keratopathy, lenticular and corneal deposits and pigmentary retinopathy, visual impairment; mild fever (after large I.M. dosage); hyperpyrexia; increased appetite and weight; a systemic lupus erythematosus-like syndrome; peripheral edema. NOTE: Sudden death in patients taking phenothiazines (apparently due to cardiac arrest or asphyxia due to failure of cough reflex) has been reported, but no causal relationship has been established.

Supplied: Tablets, 10 mg., 25 mg., 50 mg., 100 mg. and 200 mg., in bottles of 100; Spansule® capsules, 30 mg., 75 mg., 150 mg., 200 mg. and 300 mg., in bottles of 50; Injection, 25 mg./ml.; Syrup, 10 mg./5 ml.; Suppositories, 25 mg. and 100 mg.; Concentrate, 30 mg./ml. and 100 mg./ml.

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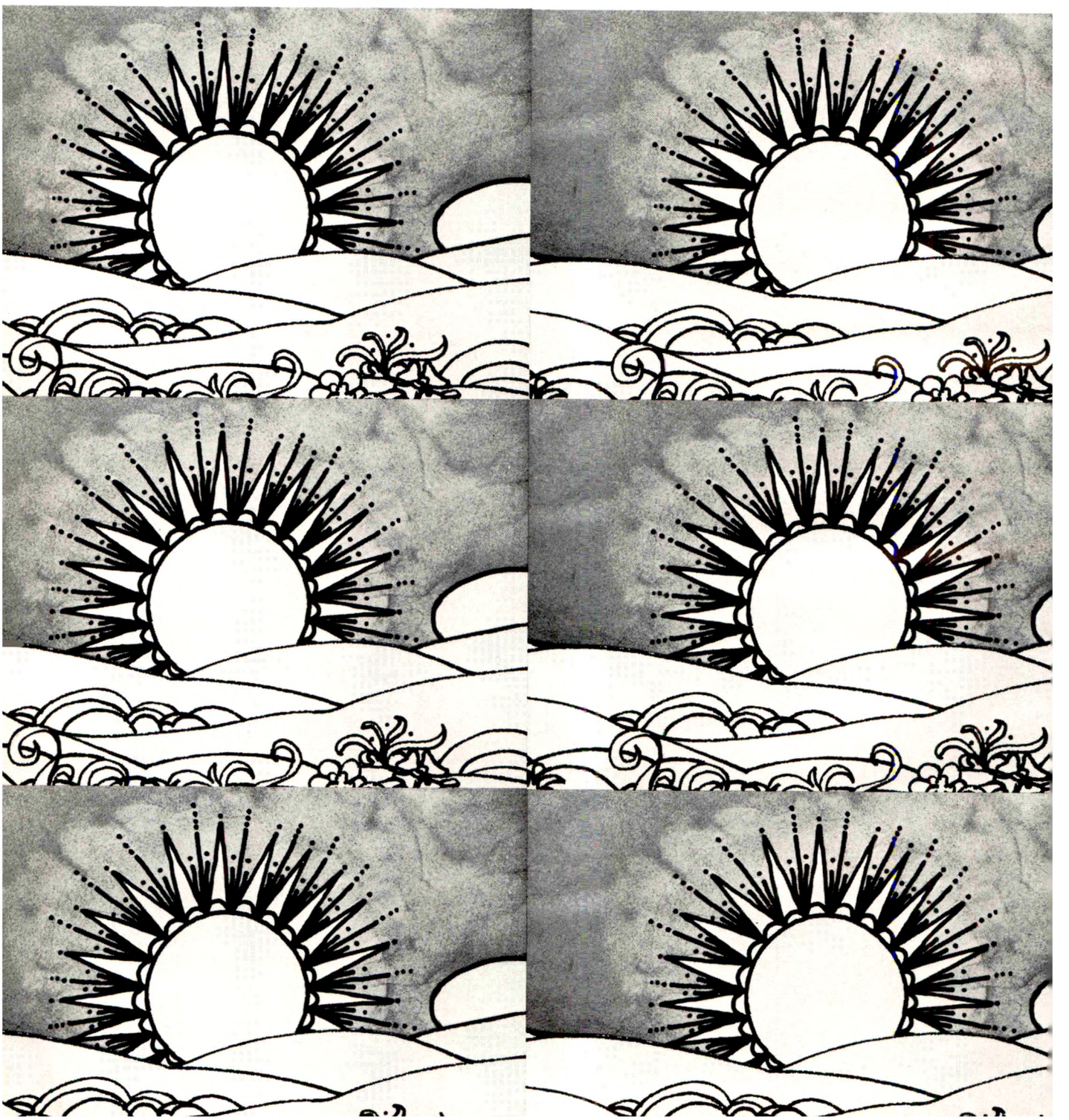
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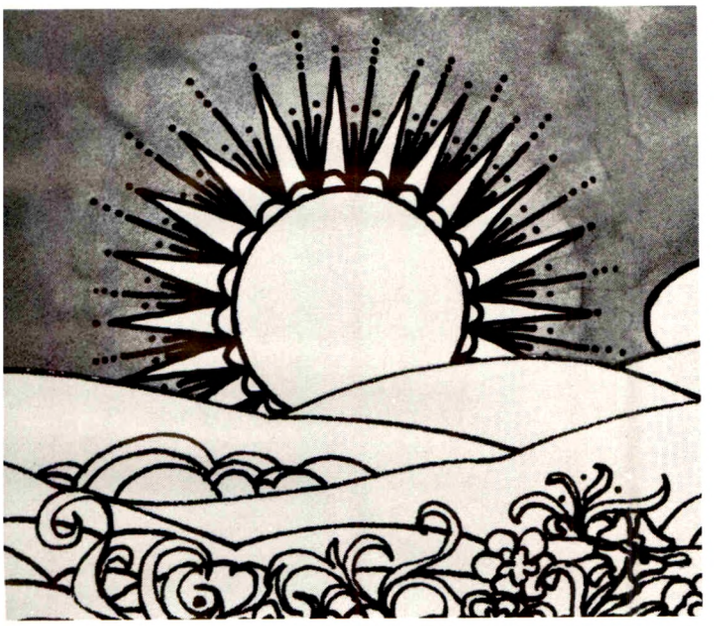
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The new-day constant for drug-induced parkinsonism:



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Non-cumulative action makes each day of therapy a new day



That's why ARTANE is ideally suited for the patient on long-term phenothiazine therapy. In economical tablets or SEQUELS Sustained Release Capsules*, it offers you *more* than the rapid reversal of extrapyramidal symptoms.

Usually there is no drug buildup to cause undue toxicity in prolonged therapy. Minimal atropine-like side effects. Accurate dosage titration in adjunctive use. And, to minimize missed doses and anxiety in outpatient therapy— one-dose *all-day* control or prevention with SEQUELS.*

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Tablets—2 mg, 5 mg; Elixir†—2 mg/5 cc or SEQUELS® Sustained Release Capsules—5 mg.

Tablets and Elixir Indications: FDA has evaluated this drug as Effective as an adjunct in the therapy of the indications listed below under SEQUELS.

***INDICATIONS FOR ARTANE SEQUELS:**
Based on a review of this drug in sustained release form by the National Academy of Sciences-National Research Council and/or other information, FDA has classified the indications as follows: Probably effective as an adjunct in the therapy of all forms of parkinsonism (postencephalitic, arteriosclerotic, and idiopathic) and for use in the prevention or control of extrapyramidal disorders due to central nervous system drugs such as reserpine and phenothiazines.

WARNING:
Patients to be treated should have a gonioscope evaluation and close monitoring of intraocular pressures at regular periodic intervals.

Precautions: Patients with cardiac, liver or kidney disorders or with hypertension should be maintained under close observation. In long-term therapy, take care to avoid allergic and other untoward reactions. Use with caution in patients with glaucoma, obstructive disease of the gastrointestinal or genitourinary tracts and in elderly males with possible prostatic hypertrophy. Geriatric patients require strict dosage regulation. Incipient glaucoma may be precipitated.

Adverse Reactions: Such effects as dryness of mouth, blurring of vision, dizziness, nausea or nervousness will be experienced by 30 to 50 per cent of patients. (These tend to lessen and can often be controlled by adjusting dosage.) Isolated instances of suppurative parotitis, skin rashes, dilation of the colon, paralytic ileus, delusions, hallucinations and paranoia (1 doubtful case) have been reported. Patients with arteriosclerosis or with a history of idiosyncrasy to drugs may exhibit mental confusion, agitation, disturbed behavior, or nausea and vomiting. If a severe reaction occurs, discontinue drug for a few days, then resume at lower dosage. Psychiatric disturbances can result from overdosage to sustain euphoria. Side effects of any atropine-like drugs include constipation, drowsiness, urinary hesitancy or retention, tachycardia, dilation of the pupil, increased intraocular tension, weakness, vomiting and headache.

†Lime-mint flavored, with 0.08% methylparaben, 0.02% propylparaben, and 5% alcohol as preservatives.

*This drug in sustained release form has been evaluated as probably effective. See Brief Summary.

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716-3

A45


EMOTIONAL WITHDRAWAL
Change in Symptom Severity in a Double-Blind Evaluation of Serentil (mesoridazine) — 516 Patients (from 1 = Not Present to 7 = Extremely Severe)
7
6
5
4
3
2
1
Pre-Dryout Mean 3.59
Post-Dryout Mean 3.74
Serentil Mean 2.99
The above is based on the Brief Psychiatric Rating Scale. The difference between the Serentil mean and each of the other scores is statistically significant. Clinical data (based on 17 double-blind studies) on file, Medical Library, Sandoz Pharmaceuticals, East Hanover, N.J.
SER 72-221

EMOTIONAL WITHDRAWAL
CONCEPTUAL DISORGANIZATION / ANXIETY
TENSION / HALLUCINATORY BEHAVIOR
SUSPICIOUSNESS / BLUNTED AFFECT

One or more of these symptoms in a schizophrenic is an indication for

Serentil®

(mesoridazine)

Tablets 50 mg. (as the besylate)



Serentil is also available in injectable form

(*Ampuls 1 cc.*: 25 mg. mesoridazine [as the besylate]. Inactive ingredients—disodium edetate, U.S.P., 0.5 mg.; sodium chloride, U.S.P., 7.2 mg.; carbon dioxide gas [bone dry], q.s.; water for injection, U.S.P., q.s. to 1 cc.) SANDOZ

See next page for brief summary.

EMOTIONAL WITHDRAWAL
CONCEPTUAL DISORGANIZATION / ANXIETY
TENSION / HALLUCINATORY BEHAVIOR
SUSPICIOUSNESS / BLUNTED AFFECT

One or more of these symptoms in a schizophrenic is an indication for



Contraindications: Severe central nervous system depression, comatose states, hypersensitivity.

Warnings: Increase dosage gradually to patients participating in activities requiring complete mental alertness (e.g., driving). The safety of this drug in pregnancy has not been established; hence, it should be given only when the anticipated benefits to be derived from treatment exceed the possible risks to mother and fetus. Use in children under 12 is not recommended. Phenothiazines are capable of potentiating central nervous system depressants as well as atropine and phosphorus insecticides.

Precautions: Ocular changes (seen with other phenothiazines) have not been seen with Serentil (mesoridazine). Because of possible hypotensive reactions, caution in parenteral use is required. Reserve parenteral administration for bedfast patients or for acute ambulatory cases, and keep patient lying down for at least ½ hour after injection. Leukopenia and/or agranulocytosis have been attributed to phenothiazine therapy. Blood dyscrasia (seen with other phenothiazines) has occurred in a single case of transient granulocytopenia.

Adverse Reactions: Serentil (mesoridazine) has demonstrated a remarkably low incidence of adverse reactions when compared with other phenothiazine compounds. *Central Nervous System:* Drowsiness, Parkinson's syndrome, dizziness, weakness, tremor, restlessness, ataxia, dystonia, rigidity, slurring, akathisia, motoric reactions (opisthotonos). *Autonomic Nervous System:* Dry mouth, nausea and vomiting, fainting, stuffy nose, photophobia, constipation and blurred vision. *Endocrine System:* Inhibition of ejaculation and lactation have been noted rarely. *Skin:* Itching, rash, hypertrophic papillae of the tongue and angioneurotic edema. *Cardiovascular System:* Hypotension, tachycardia, EKG changes.

The following reactions have occurred with phenothiazines and should be considered: *Autonomic Reactions*—Miosis, obstipation, anorexia, paralytic ileus. *Cutaneous Reactions*—Erythema, exfoliative dermatitis, contact dermatitis. *Blood Dyscrasias*—Agranulocytosis, leukopenia, eosinophilia, thrombocytopenia, anemia, aplastic anemia, pancytopenia. *Allergic Reactions*—Fever, laryngeal edema, angioneurotic edema, asthma. *Hepatotoxicity*—Jaundice, biliary stasis. *Cardiovascular Effects*—Changes in terminal portion of electrocardiogram, including prolongation of Q-T interval, lowering and inversion of T-wave, and appearance of a wave tentatively identified as a bifid T or a U wave have been observed with phenothiazines, including Serentil (mesoridazine); these appear to be reversible and due to altered repolarization, not myocardial damage. There is no evidence that these changes are precursors of any significant disturbance of cardiac rhythm. Hypotension, rarely resulting in cardiac arrest. *Extrapyramidal Symptoms*—Akathisia, agitation, motor restlessness, dystonic reactions, trismus, torticollis, opisthotonos, oculogyric crises, tremor, muscular rigidity, and akinesia, occasionally persisting for several months or years especially in elderly patients with brain damage. *Endocrine Disturbances*—Menstrual irregularities, altered libido, gynecomastia, weight gain, false positive pregnancy tests. *Urinary Disturbances*—Retention, incontinence. *Others*—Hyperpyrexia, behavioral effects suggestive of a paradoxical reaction, including excitement, bizarre dreams, aggravation of psychoses, and toxic confusional states; following long-term treatment, a peculiar skin-eye syndrome marked by progressive pigmentation of skin or conjunctiva and/or accompanied by discoloration of exposed sclera and cornea; stellate or irregular opacities of anterior lens and cornea.

Dosage and Administration: ORAL: Should be adjusted to needs of the individual. Lowest effective dosage should always be used. When maximum response is achieved, dosage may be reduced gradually to maintenance level. *Schizophrenia:* For most patients, regardless of severity, starting dose of 50 mg. t.i.d. recommended. Usual optimum total daily dose range 100-400 mg. *Behavioral Problems in Mental Deficiency and Chronic Brain Syndrome:* For most patients starting dose of 25 mg. t.i.d. recommended. Usual optimum total daily dose range 75-300 mg. *Alcoholism:* For most patients usual starting dose is 25 mg. b.i.d. Usual optimum total daily dose range 50-200 mg. *Psychoneurotic Manifestations:* For most patients usual starting dose is 10 mg. t.i.d. Usual optimum total daily dose range 30-150 mg. INJECTABLE FORM: For situations in which an intramuscular form of medication is indicated. For most patients a starting dose of 25 mg. is recommended, to be repeated in 30-60 minutes if necessary. Usual optimum total daily dose range 25-200 mg.

Before prescribing, consult package circular.

Sandoz Pharmaceuticals/East Hanover, N.J. 07936

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SER 72-239



Withdrawn and uncommunicative?...Or responsive?

While psychotic symptoms remain acute, the barrier between you and the withdrawn, uncommunicative patient may be insurmountable. Prompt intervention with HALDOL (haloperidol) often makes it possible for you to reach... relate...rehabilitate.

And rapport with such patients is further enhanced because HALDOL usually leaves patients alert and relatively non-sedated.

responsiveness often begins with

HALDOL® (haloperidol)

For information relating to Indications, Contraindications, Warnings, Precautions and Adverse Reactions, please turn page.

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Haldol®
(HALOPERIDOL)

a first choice for prompt rapport

A Dosage Form for Every Need:

4 tablet strengths for convenience in individualizing dosage: ½ mg., 1 mg., 2 mg. and 5 mg.

An undetectable, tasteless Liquid Concentrate for the patient unable or unwilling to swallow tablets: 2 mg. per cc.

A rapid-acting Injection for psychiatric emergencies: 5 mg. per cc., with 0.5 mg. methylparaben and 0.05 mg. propylparaben per cc., and lactic acid for pH adjustment to 3.4±0.2.

Summary of Directions for Use

Indications: For the treatment of such symptoms as moderate to severe agitation, anxiety and tension, assaultiveness, delusions, hallucinations, hostility, and hyperactivity when they are manifestations of psychosis including schizophrenia, the manic type of manic depressive illness, or psychotic reactions associated with organic brain syndromes or mental retardation. For the control of tics and vocal utterances of Gilles de la Tourette's Syndrome.

Contraindications: HALDOL (haloperidol) is contraindicated in patients who are severely depressed, comatose, have CNS depression due to alcohol or other centrally-acting depressants, have Parkinson's disease or are hypersensitive to this drug.

Warnings: ***Usage in Pregnancy***—Safe use of HALDOL (haloperidol) in pregnancy and lactation has not been established; therefore, its use in pregnancy, in nursing mothers, or in women of childbearing potential requires that the possible benefits of the drug be weighed against the potential hazards. A case of phocomelia in an infant whose mother received haloperidol along with a number of other medications during the first trimester of pregnancy has been reported (a causal relationship was not established in this case). Animals receiving 2 to 20 times the maximum human dose of HALDOL orally and/or parenterally showed increased incidence of resorption, reduced fertility, delayed delivery, dose-related pup mortality (presumably due to lack of maternal care reflecting CNS depression).

Usage in Children—Safety and effectiveness in children have not been established; therefore, this drug is not recommended for use in the pediatric age group.

General—Cases of bronchopneumonia, some fatal, have followed the use of major tranquilizers, including haloperidol. It has been postulated that lethargy and decreased sensation of thirst may lead to dehydration, hemoconcentration and reduced pulmonary ventilation. If these signs and symptoms appear, especially in the elderly, the physician should institute remedial therapy promptly. Although not reported with HALDOL (haloperidol), decreased serum cholesterol and/or cutaneous and ocular changes have been reported in patients receiving chemically-related drugs. HALDOL may impair the mental and/or physical abilities required for the performance of hazardous tasks such as operating machinery or driving a motor vehicle. The ambulatory patient should be warned accordingly. The use of alcohol should be avoided due to possible additive effects and hypotension.

Precautions: HALDOL (haloperidol) should be administered cautiously to patients: (1)—with severe cardiovascular disorders, because of the possibility of transient hypotension and/or precipitation of anginal pain. Should hypotension occur and a vasopressor be required, *epinephrine should not be used* since HALDOL may block its vasopressor activity and paradoxical further lowering of blood pressure may occur. (2)—receiving anticonvulsant medication, because HALDOL may lower the convulsive threshold, although it will *not* increase the effects of anticonvulsant medication. Adequate anticonvulsant therapy should be maintained concomitantly. (3)—with known allergies, or with a history of allergic reactions to drugs. (4)—receiving anticoagulants, since an isolated instance of interference occurred with the effects of one anticoagulant (phenindione).

If concomitant anti-Parkinson medication is required, it may have to be continued after haloperidol is discontinued because of the difference in excretion rates. If both are discontinued simultaneously, extrapyramidal symptoms may occur. Intraocular pressure may increase when anticholinergic drugs, including anti-Parkinson agents, are administered concomitantly with HALDOL. When HALDOL is used to control mania in cyclic disorders there may be a rapid mood swing to depression.

Adverse Reactions: ***CNS Effects:*** *Extrapyramidal Reactions*—Neuromuscular (extrapyramidal) reactions have been reported frequently, often during the first few days of treatment. Generally they involved Parkinson-like symptoms which usually were mild to moderately severe and reversible. Other types of neuromuscular reactions (motor restlessness, dystonia, akathisia, hyperreflexia, opisthotonos, oculogyric crises) have been reported far less frequently, but were often more severe. Severe extrapyramidal reactions have been reported at relatively low doses. Generally extrapyramidal symptoms are dose related since they occur at relatively high doses and disappear or become less severe when the dose is reduced. Administration of anti-Parkinson drugs may be required for control of such reactions. Persistent extrapyramidal reactions have been reported and the drug may have to be discontinued in such cases. *Other CNS Effects*—Insomnia, restlessness, anxiety, euphoria, agitation, drowsiness, depression, lethargy, headache, confusion, vertigo, grand mal seizures, and exacerbation of psychotic symptoms including hallucinations. ***Cardiovascular Effects:*** Tachycardia and hypotension. ***Hematologic Effects:*** Reports have appeared of mild and usually transient leukopenia and leukocytosis, minimal decreases in red blood cell counts, anemia, or a tendency toward lymphomonocytosis. Agranulocytosis has rarely been reported and then only in association with other medication. ***Liver Effects:*** Impaired liver function and/or jaundice have been reported, although a causal relationship has not been established. ***Dermatologic Reactions:*** Maculopapular and acneiform skin reactions and isolated cases of photosensitivity and loss of hair. ***Endocrine Disorders:*** Lactation, breast engorgement, mastalgia, menstrual irregularities, gynecomastia, impotence, increased libido, hyperglycemia and hypoglycemia. ***Gastrointestinal Effects:*** Anorexia, constipation, diarrhea, hypersalivation, dyspepsia, nausea and vomiting. ***Autonomic Reactions:*** Dry mouth, blurred vision, urinary retention and diaphoresis. ***Respiratory Effects:*** Laryngospasm, bronchospasm and increased depth of respiration.

Complete dosage information available in insert which accompanies each package (or on request).

The use of the injectable form is intended for the acutely agitated psychotic patient with moderately severe to very severe symptoms.

IMPORTANT: Full directions for use should be read before HALDOL (haloperidol) is administered or prescribed. 11/72

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An intensive treatment mental health center with State and Joint Commission Accreditation for ages commencing with adolescence and continuing through the Medicare years.

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Electro shock therapy. Indoklon shock therapy. Insulin coma therapy. Pharmaco therapy. Individual and Group psychotherapy. Complete Occupational, Recreational and Social Service Departments.

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BALDPATE, INC.

A PRIVATE PSYCHIATRIC HOSPITAL
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Located 30 miles north of Boston on 130 acres, set among peaceful meadows bordering a quiet lake and wooded hill, Baldpate presents a relaxing atmosphere to the problem-beset patient.

Baldpate is an active treatment hospital for psychoses, neuroses, alcoholism, and drug addiction.

Psychotherapy, somatic therapy, milieu therapy, and pharmacotherapy are available from qualified physicians. There is also occupational and recreational therapy under the direction of trained therapists.

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The Country Place
LITCHFIELD, CONNECTICUT



THE COUNTRY PLACE is a residential community for the emotionally disturbed adult who has more insight than he can use, who knows how he should act but withdraws from action.

THE COUNTRY PLACE offers
a home where he is understood
a work place where he can cope with the demands
a community where he can find social identity

THE COUNTRY PLACE
provides team work in socially useful projects
self help through interaction in groups
exploration of existent reality

THE COUNTRY PLACE maintains a well-trained professional staff for individual and group therapy psychodrama, art, dance and music therapy, as well as sports and games

WEEK END WORKSHOPS for professionals interested in studying our method of helping the disturbed person in creating a new identity

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UNIQUE-NESS:

In People & at the Lutheran Hospital Psychiatric Care Unit

Providing complete psychiatric care in a general hospital setting with special emphasis on disorders of adolescence.

Lutheran Hospital of Milwaukee, Inc.

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Chairman, Department of Psychiatry
2200 W. Kilbourn Ave. Milwaukee, Wisc. 53233

Today, she managed a smile



(Not long ago, she couldn't stop sobbing)

Before he sees that first positive response—however hesitant and tentative—the physician may have to bring into play many different aspects of therapy. Establishing a therapeutic relationship may be the first difficulty as well as the first necessity. Psychotherapy, family and community support, occupational and social counseling, and drug therapy may all have to be enlisted.

The characteristically rapid energizing action of VIVACTIL may help establish early therapeutic rapport by lessening the patient's lethargy—often during the first week of medication. VIVACTIL helps elevate mood, usually within the third or fourth week of treatment.

Characteristically, the drug has no sedating or tranquilizing properties. (Symptoms such as anxiety or agitation may be aggravated.)

Dosage of VIVACTIL must be individualized, and patients should be under close medical supervision. For many adult patients with clinically significant depression, 10 mg t.i.d. may provide control of symptoms. Others may require as little as 15 mg or as much as 60 mg a day. In elderly patients and adolescents, lower dosages are recommended.

In depression,

TABLETS, 5 mg and 10 mg

Vivactil®

(Protriptyline HCl | MSD) helps establish early therapeutic rapport

ontraindications: Known hypersensitivity; acute recovery phase following myocardial farction. Not recommended for use in children. Should not be given concomitantly with n MAOI; hyperpyretic crises, severe convulsions, and deaths have occurred in patients ceiving tricyclic antidepressant and MAOI drugs simultaneously. When it is desired to ubstitute protriptyline HCl for an MAOI, a minimum of 14 days should be allowed to elapse fter the latter is discontinued. Protriptyline HCl should then be initiated cautiously with radual increase in dosage until optimum response is achieved.

arnings: May block the antihypertensive effect of guanethidine or similarly acting compounds. May impair mental and/or physical abilities required for the performance of azardous tasks, such as operating machinery or driving a motor vehicle. Should be used ith caution in patients with a history of seizures and, because of its autonomic activity, n patients with a tendency to urinary retention or increased intraocular tension.

achycardia and postural hypotension may occur more frequently than with other antiepressant drugs. Should be used with caution in elderly patients and patients with ardiovascular disorders; such patients should be observed closely because of the tency of the drug to produce tachycardia, hypotension, arrhythmias, and prolongation f the conduction time. Myocardial infarction and stroke have occurred with drugs of this lass. On rare occasions, hyperthyroid patients or those receiving thyroid medication ay develop arrhythmias when this drug is given.

sage in Children: Not recommended for use in children because safety and effectiveness n the pediatric age group have not been established.

sage in Pregnancy: Safe use in pregnancy and lactation has not been established; therefore, use in pregnant women, nursing mothers, or women who may become pregnant equires that possible benefits be weighed against possible hazards to mother and child.

recautions: When protriptyline HCl is used to treat the depressive component of schizophrenia, psychotic symptoms may be aggravated; likewise, in manic-depressive psychosis, epressed patients may experience a shift toward the manic phase; paranoid delusions, ith or without associated hostility, may be exaggerated. In any of these circumstances, may be advisable to reduce the dose of protriptyline HCl or to use a major tranquilizing rug, such as perphenazine, concurrently. Symptoms, such as anxiety or agitation, may e aggravated in overactive or agitated patients.

hen given with anticholinergic agents or sympathomimetic drugs, close supervision nd careful adjustment of dosages are required. In healthy test subjects, maximum herapeutic doses significantly potentiated the peripheral circulatory effects of intravenous norepinephrine and epinephrine (manifested by undue increase in systolic and iastolic blood pressure and decrease in pulse rate). May enhance the response to alcohol nd the effects of barbiturates and other CNS depressants. The possibility of suicide in epressed patients remains during treatment and until significant remission occurs; this ype of patient should not have easy access to large quantities of the drug. Concurrent dministration with electroshock therapy may increase the hazards of therapy; such reatment should be limited to patients for whom it is essential. Discontinue the drug everal days before elective surgery, if possible.

dverse Reactions: *Note:* Included in this listing are a few adverse reactions which have ot been reported with this specific drug. However, the pharmacologic similarities among he tricyclic antidepressant drugs require that each of the reactions be considered when rotriptyline HCl is administered. Protriptyline HCl is more likely to aggravate agitation nd anxiety and produce cardiovascular reactions such as tachycardia and hypotension.

ardiovascular: hypotension, hypertension, tachycardia, palpitation, arrhythmias.

NS and Neuromuscular: confusional states (especially in the elderly); disorientation; delusions; hallucinations; anxiety; agitation; restlessness; insomnia; numbness, tingling, nd paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremor; seizures.

Anticholinergic: dry mouth and, rarely, associated sublingual adenitis; blurred vision; disturbance of accommodation; mydriasis; constipation; urinary retention; dilatation of the urinary tract.

Other: skin rash, petechiae, urticaria, itching, photosensitization (avoid excessive exposure to sunlight), edema (general, or of face and tongue), nausea, vomiting, epigastric distress, anorexia, peculiar taste, stomatitis, parotid swelling, impotence, jaundice (simulating obstructive), drowsiness, dizziness, weakness, fatigue, headache, perspiration, weight gain or loss, urinary frequency.

Withdrawal Symptoms: In an occasional patient, abrupt cessation of treatment after prolonged administration may produce nausea, headache, and malaise. These are not indicative of addiction.

The following adverse reactions have been reported less frequently with the class of antidepressant agent to which protriptyline HCl belongs: myocardial infarction, heart block, stroke, panic, nightmares, alteration in EEG patterns, hypomania, exacerbation of psychosis, extrapyramidal symptoms, tinnitus, paralytic ileus, delayed micturition, drug fever, bone-marrow depression, agranulocytosis, eosinophilia, purpura, thrombocytopenia, diarrhea, abdominal cramps, black tongue, testicular swelling and gynecomastia in the male, breast enlargement and galactorrhea in the female, increased or decreased libido, altered liver function, flushing, nocturia, alopecia.

Supplied: Tablets, containing 5 mg and 10 mg protriptyline HCl each, in single-unit packages of 100 and bottles of 100 and 1000.

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

addendum

MSD
MERCK
SHARP
DOHME

MSD 26 5 mg (orange)

MSD 47 10 mg (yellow)

The usual regimen for adults is 15 to 40 mg a day divided into three or four doses. Dosage may be increased to 60 mg a day if necessary.

In elderly and adolescent patients, lower dosages are recommended; initially, a regimen of 5 mg t.i.d. is suggested with adjustment as necessary to the required amount. In elderly patients, the cardiovascular system must be monitored closely when the daily dose exceeds 20 mg.

Because VIVACTIL (Protriptyline HCl, MSD) characteristically is a nonsedating tricyclic antidepressant, activating and energizing in effect, the last dose of the day should be given no later than mid-afternoon to avoid insomnia. Required increases should be added to the morning dose.

When necessary to increase dosage, it should be done gradually. After satisfactory improvement has been achieved, dosage should be reduced to the smallest amount that will maintain relief of symptoms. Maintenance therapy should be continued for at least three months after satisfactory improvement occurs.

(*Usage in Children:* In view of the lack of experience in children, this drug is not recommended for patients under 12 years of age.)



A good morning after a sleep-through night

A good morning should be just that—and not a morning of grogginess and diminished alertness. A good reason why you should consider Quāālude® for your insomniac patients and those whose sleep patterns have been altered by disease or surgery.

Quāālude-300 is usually effective *in inducing 6 to 8 hours of restful sleep in the sleepless, generally within 10 to 30 minutes.*

And, *usually the patient awakens easily, without a "hangover" due to residual hypnotic effect.*

Non-barbiturate Quāālude-300 is chemically unrelated to other sedative-hypnotics. Its therapeutic value has been established in controlled clinical studies and by wide physician usage of methaqualone throughout the world.

Side effects reported have been mild, transient, and have often proved to be statistically insignificant when compared to placebo effects. Caution must be exercised in administering methaqualone to individuals known to be addiction-prone or those whose history suggests they may increase the dosage on their own initiative. (See "Warnings" and "Adverse Reactions" sections in brief summary below.)

The next time you're facing a patient with insomnia who needs your help, prescribe Quāālude-300. He'll usually sleep better—and wake up better, too.

a non-barbiturate sedative-hypnotic

Quāālude®-300
(methaqualone) **300 mg. tablets**

Brief Summary of Prescribing Information

Indications: Sleep. Daytime sedation.

Usual Adult Dose: *For sleep,* 150-300 mg. at bedtime. For patients previously on other hypnotics, 300 mg. for five to seven nights. *For sedation,* 75 mg. t.i.d. or q.i.d. Not recommended in children. Dosage should be individualized for aged, debilitated or highly agitated patients.

NEW FORMULATION: PROVIDES INCREASED ABSORPTION; THERAPEUTIC RESPONSE MAY BE MORE PROMPT AND PRONOUNCED. WARN PATIENTS, USING DRUG FOR SEDATION, AGAINST OPERATING CAR OR DANGEROUS MACHINERY.

Overdosage: Acute overdosage may result in delirium and coma, with restlessness and hypertonia, progressing to convulsions. Evacuate gastric contents, maintain adequate ventilation and support blood pressure, if necessary. Dialysis may be helpful. Analeptics are contraindicated. Succinylcholine accompanied by assisted respiration has been proposed for prolonged convulsions. Overdoses of methaqualone appear to be less often associated with cardiac or respiratory depression than are overdoses of oral barbiturates, but shock and respiratory arrest may occasionally occur.

Contraindications: Contraindicated in women who are or may become pregnant; or patients with known hypersensitivity.

Warnings: Take hypnotic dose only at bedtime. Not recommended in children. Warn patient on Quāālude against driving a car or operating dangerous machinery. Care needed when administered with other sedative, analgesic or psychotropic drugs or alcohol because of possible additive effects. Pending longer clinical experience, Quāālude (methaqualone) should not be used continuously for periods exceeding three months. *Psychological dependence* occasionally occurs. *Physical dependence* rarely reported. However, caution needed with addiction-prone patients.

Precautions: Use with caution and prescribe small quantities in patients with anxiety states where impending depression or suicidal tendencies exist. Give in reduced doses, if at all, in patients with impaired hepatic function.

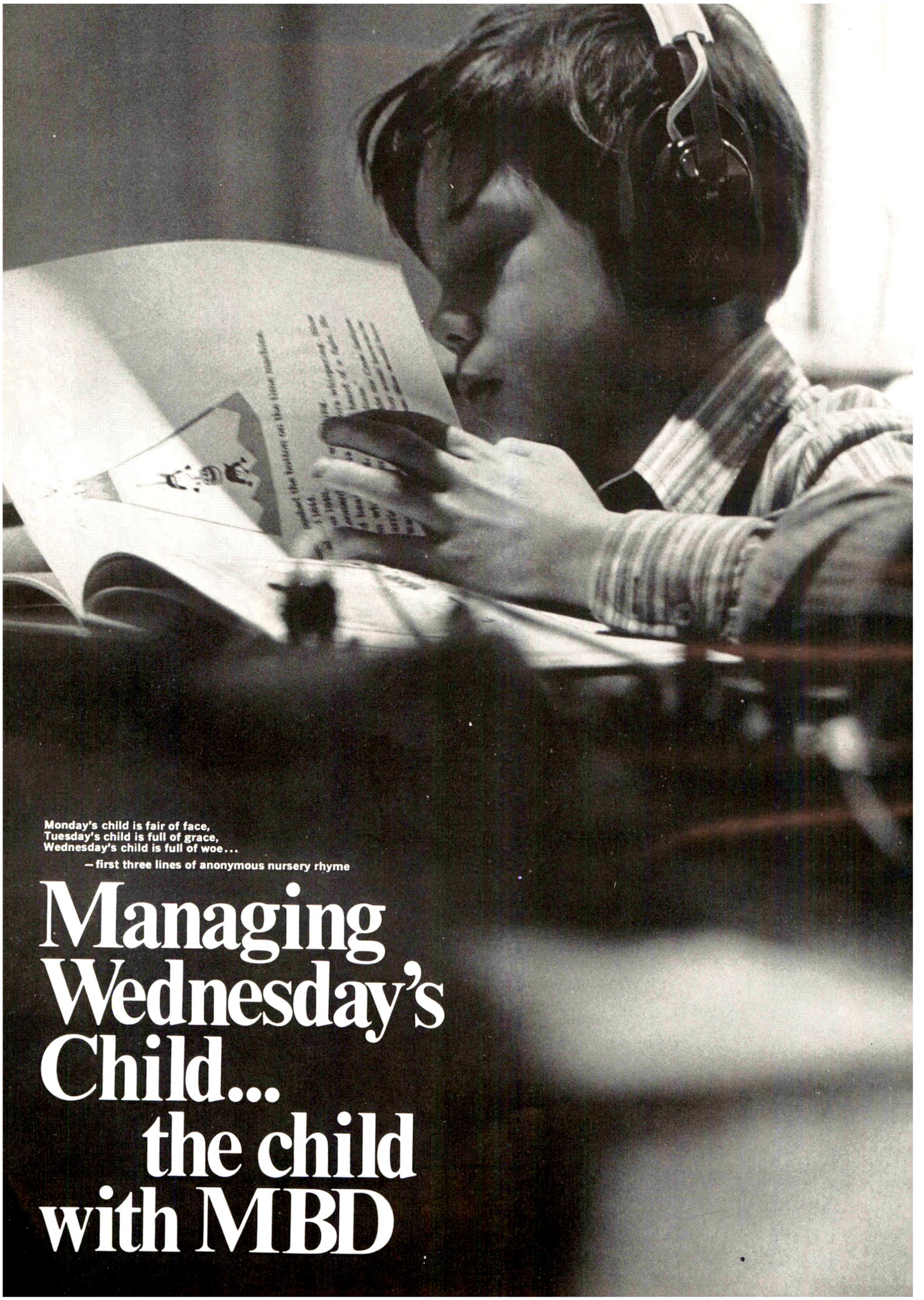
Adverse Reactions: *Neuropsychiatric:* headache, hangover, fatigue, dizziness, torpor, transient paresthesia of the extremities. An occasional patient has experienced restlessness or anxiety. *Hematologic:* aplastic anemia possibly related to methaqualone has been very rarely reported. *Gastrointestinal:* dry mouth, anorexia, nausea, emesis, epigastric discomfort, diarrhea. *Dermatologic:* diaphoresis, bromhidrosis, exanthema. Urticaria has been particularly well documented.

Supplied: Quāālude-150 (150 mg. white, scored tablets). Quāālude-300 (300 mg. white, scored tablets).

Consult complete literature before prescribing.

WILLIAM H. RORER, INC.
Fort Washington, Pa. 19034

ROHRER



Monday's child is fair of face,
Tuesday's child is full of grace,
Wednesday's child is full of woe...

—first three lines of anonymous nursery rhyme

Managing Wednesday's Child... the child with MBD

Vednesday's child is full of woe"
It need not be this way for the MBD child.
He can learn and adjust if given helping hand.

Without help, the MBD child may be a ow reader, can find writing difficult, and rithmetic hard to grasp. He may be excitable, nd his actions can be disruptive. The result can eriously hamper his educational and social evelopment.

But, properly diagnosed and treated, MBD - Minimal Brain Dysfunction – can be brought nder control so that the afflicted child can evelop normally.

And Ritalin can play an important part in ıe total rehabilitation program f the MBD child, which includes emedial measures at home and t school. It's currently the rug of choice in many MBD tuations.[1]



Ritalin is well tolerated. It an help control the excessive ıotor activity of the MBD child nd ameliorate behavioral and earning problems.

Of course, Ritalin is not ıdicated for childhood personality and behavioral disorders not associated with MBD.

eference

Charlton, M. H.: Paper presented at the Annual Convention of e Medical Society of the State of New York, New York, N.Y., eb. 7, 1971.

italin® hydrochloride ©
nethylphenidate hydrochloride)

ABLETS

IDICATION

inimal Brain Dysfunction in Children—as adjunctive therapy to her remedial measures (psychological, educational, social)

ecial Diagnostic Considerations

ecific etiology of Minimal Brain Dysfunction (MBD) is unknown, ıd there is no single diagnostic test. Adequate diagnosis requires e use not only of medical but of special psychological, educaonal, and social resources.

ıe characteristic signs most often observed are chronic history of ıort attention span, distractibility, emotional lability, impulsivity, ıd moderate to severe hyperactivity; specific learning disabilities; erceptual motor impairment; minor neurological signs and abnoral EEG. The diagnosis of MBD must be based upon a complete story and evaluation of the child and not solely on the presence of ıe or more of these signs.

rug treatment is not indicated for all children with MBD. Appropiate educational placement is essential and psychological or social tervention may be necessary. When remedial measures alone are sufficient, the decision to prescribe stimulant medication will epend upon the physician's assessment of the chronicity and severity the child's symptoms.

ONTRAINDICATIONS

arked anxiety, tension, and agitation, since Ritalin may aggravate ese symptoms. Also contraindicated in patients known to be hypernsitive to the drug and in patients with glaucoma.

ARNINGS

talin is not recommended for children under six years, since ıfety and efficacy in this age group have not been established. nce sufficient data on safety and efficacy of long-term use of talin in children with minimal brain dysfunction are not yet availble, those requiring long-term therapy should be carefully monitored. talin should not be used for severe depression of either exogenous endogenous origin or for the prevention of normal fatigue states. italin may lower the convulsive threshold in patients with or without prior seizures; with or without prior EEG abnormalities, even in absence of seizures. Safe concomitant use of anticonvulsants and Ritalin has not been established. If seizures occur, Ritalin should be discontinued.

Use cautiously in patients with hypertension.

Drug Interactions

Ritalin may decrease the hypotensive effect of guanethidine. Use cautiously with pressor agents and MAO inhibitors. Ritalin may inhibit the metabolism of coumarin anticoagulants, anticonvulsants (phenobarbital, diphenylhydantoin, primidone), phenylbutazone, and tricyclic antidepressants (imipramine, desipramine). Downward dosage adjustments of these drugs may be required when given concomitantly with Ritalin.

Usage in Pregnancy

Adequate animal reproduction studies to establish safe use of Ritalin during pregnancy have not been conducted. Therefore, until more information is available, Ritalin should not be prescribed for women of childbearing age unless, in the opinion of the physician, the potential benefits outweigh the possible risks.

Drug Dependence

Ritalin should be given cautiously to emotionally unstable patients, such as those with a history of drug dependence or alcoholism, because such patients may increase dosage on their own initiative.

Chronically abusive use can lead to marked tolerance and psychic dependence with varying degrees of abnormal behavior. Frank psychotic episodes can occur, especially with parenteral abuse. Careful supervision is required during drug withdrawal, since severe depression as well as the effects of chronic overactivity can be unmasked. Long-term follow-up may be required because of the patient's basic personality disturbances.

PRECAUTIONS

Patients with an element of agitation may react adversely; discontinue therapy if necessary. Periodic CBC and platelet counts are advised during prolonged therapy.

ADVERSE REACTIONS

Nervousness and insomnia are the most common adverse reactions but are usually controlled by reducing dosage and omitting the drug in the afternoon or evening. Other reactions include: hypersensitivity (including skin rash, urticaria, fever, arthralgia, exfoliative dermatitis, and erythema multiforme with histopathological findings of necrotizing vasculitis); anorexia; nausea; dizziness; palpitations; headache; dyskinesia; drowsiness; blood pressure and pulse changes, both up and down; tachycardia; angina; cardiac arrhythmias; abdominal pain; weight loss during prolonged therapy. In children, loss of appetite, abdominal pain, weight loss during prolonged therapy, insomnia, and tachycardia may occur more frequently. Toxic psychosis has been reported.

DOSAGE AND ADMINISTRATION

Children with Minimal Brain Dysfunction (6 years and over)

Start with small doses (*eg*, 5 mg before breakfast and lunch) with gradual increments of 5 to 10 mg weekly. Daily dosage above 60 mg is not recommended. If improvement is not observed after appropriate dosage adjustment over a one-month period, the drug should be discontinued.

If paradoxical aggravation of symptoms or other adverse effects occur, reduce dosage, or, if necessary, discontinue the drug.

Ritalin should be periodically discontinued to assess the child's condition. Improvement may be sustained when the drug is either temporarily or permanently discontinued.

Drug treatment should not and need not be indefinite and usually may be discontinued after puberty.

HOW SUPPLIED

Tablets, 20 mg (peach, scored); bottles of 100 and 1000.
Tablets, 10 mg (pale green, scored); bottles of 100, 500, 1000 and Strip Dispensers of 100.
Tablets, 5 mg (pale yellow); bottles of 100, 500, and 1000.

Consult complete product literature before prescribing.

CIBA Pharmaceutical Company
Division of CIBA-GEIGY Corporation
Summit, New Jersey 07901

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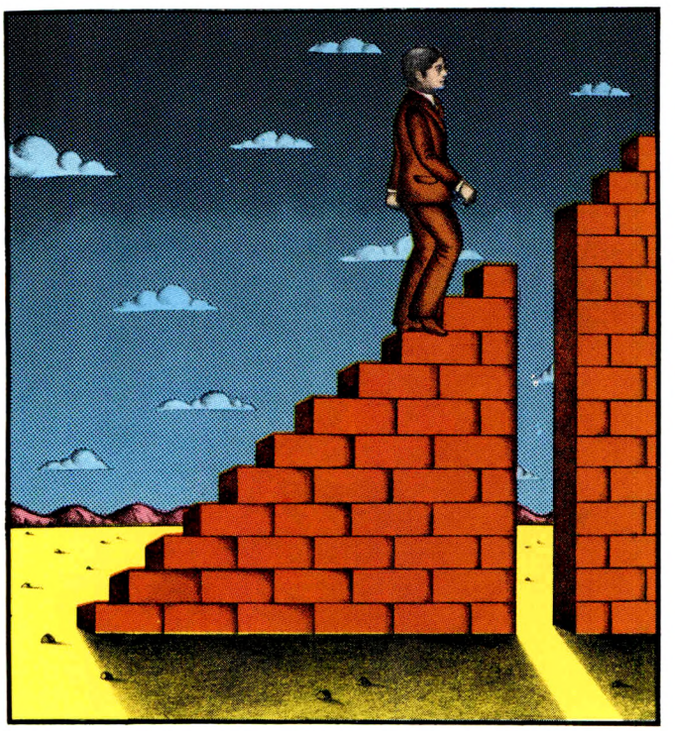
Ritalin®
(methylphenidate)
only when medication is indicated

C I B A

A57

The psychoneurotic patient's prognosis may be good...

As a group, psychoneurotic patients tend to respond positively to psychotherapy. Follow-up studies indicate that up to two-thirds of treated patients may show significant and often sustained improvement.



In individual cases, the prognosis appears particularly favorable for the psychoneurotic who has had a good premorbid personality structure and a record of reasonably good interpersonal competence. As might be expected, patients judged to be "attractive" candidates for therapy often tend to derive greater benefits from therapeutic intervention than those considered "unattractive."

The global assessment of "attractiveness" is influenced by such factors as youthfulness, intelligence, ability to relate and good occupational history.

But excessive anxiety can block recovery...

Anxiety is the hallmark of psychoneurotic states. In excess it may not alter the patient's "prognostic rating," but it can slow therapeutic progress—sometimes to a marked extent. At the outset of therapy, for instance, severe or persistent anxiety can be particularly

obstructive, sometimes hampering for long periods the patient's ability to participate in a productive psychotherapeutic relationship. At later stages, intense anxiety may impair the patient's receptivity to further probing and block his attempts to retrieve and express pertinent material.

When the patient's disabling anxiety continues to impede therapeutic progress, management of his condition may often be significantly facilitated by adjunctive Librium (chlordiazepoxide HCl).

Librium generally relieves excessive anxiety without unduly impairing mental acuity or ability to perform. As with all CNS-acting drugs, however, patients should be cautioned against hazardous occupations requiring complete mental alertness. (See Warnings section in summary of prescribing information.) When the patient's anxiety has been reduced to appropriate levels, Librium should, of course, be discontinued.

Before prescribing, please consult complete product information, a summary of which follows:
Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.
Contraindications: Patients with known hypersensitivity to the drug.
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.
Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.
Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido —all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.
Supplied: Librium® Capsules containing 5 mg, 10 mg or 25 mg chlordiazepoxide HCl. Libritabs® Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.

To relieve obstructive anxiety consider

Librium®

(chlordiazepoxide HCl)

10-mg, 25-mg capsules
Up to 100 mg daily for severe anxiety

ROCHE
Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

HELP KEEP HIM OUT OF THE BAR



Bars may draw him like a magnet. Not for social reasons as much as antisocial ones. His drinking hurts himself and others close to him. He's an alcoholic, a public health problem, and a menace behind the wheel of a car. He's ill and needs your help and treatment.

For more than 20 years now, ANTABUSE has proved its effectiveness as a medical adjunct in the management of alcoholics who want to recover. ANTABUSE offers strong deterrent action. It can help keep the alcoholic sober so that he can participate in a total treatment program utilizing many supportive measures.

Once the alcoholic accepts ANTABUSE therapy, he has made his decision to stop drinking. By taking his tablet each day, he dai strengthens his resolve. The patient must be given a clear and detailed description of the effects of ingesting alcohol after he has taker ANTABUSE even up to 14 days after the last dose. ANTABUSE is nonhabituating; there is no danger of cross-addiction.

ANTABUSE

Brand of DISULFIRAM

a strong deterrent for the alcoholic who doesn't want to drink

See opposite page for brief summary of prescribing information

ANTABUSE® (DISULFIRAM)

a strong deterrent for the alcoholic who doesn't want to drink



BRIEF SUMMARY *(For full prescribing information, see package circular.)*

ANTABUSE® Brand of disulfiram
In Alcoholism

INDICATION: ANTABUSE is an aid in the management of selected chronic alcoholic patients who want to remain in a state of enforced sobriety so that supportive and psychotherapeutic treatment may be applied to best advantage. (Used alone, without proper motivation and without supportive therapy, ANTABUSE is not a cure for alcoholism, and it is unlikely that it will have more than a brief effect on the drinking pattern of the chronic alcoholic.)

CONTRAINDICATIONS: Patients who are receiving or have recently received metronidazole, paraldehyde, alcohol, or alcohol-containing preparations, *e.g.* cough syrups, tonics, and the like, should not be given ANTABUSE.

ANTABUSE is contraindicated in the presence of severe myocardial disease or coronary occlusion, psychoses, or hypersensitivity.

WARNINGS

ANTABUSE should never be administered to a patient when he is in a state of alcohol intoxication or without his full knowledge.

The physician should instruct relatives accordingly.

The patient must be fully informed of the ANTABUSE-alcohol reaction. He must be strongly cautioned against surreptitious drinking while taking the drug, and he must be fully aware of possible consequences. He should be warned to avoid alcohol in disguised form, *i.e.* in sauces, vinegars, cough mixtures, and even aftershave lotions and back rubs. He should also be warned that reactions may occur with alcohol up to 14 days after ingesting ANTABUSE.

THE ANTABUSE-ALCOHOL REACTION: ANTABUSE plus alcohol, even small amounts, produces flushing, throbbing in head and neck, throbbing headache, respiratory difficulty, nausea, copious vomiting, sweating, thirst, chest pain, palpitation, dyspnea, hyperventilation, tachycardia, hypotension, syncope, marked uneasiness, weakness, vertigo, blurred vision, and confusion. In severe reactions there may be respiratory depression, cardiovascular collapse, arrhythmias, myocardial infarction, acute congestive heart failure, unconsciousness, convulsions, and death.

The intensity of the reaction varies with each individual, but is generally proportional to the amounts of ANTABUSE (disulfiram) and alcohol ingested. Mild reactions may occur in the sensitive individual when the blood alcohol concentration is increased to as little as 5 to 10 mg. per 100 cc. Symptoms are fully developed at 50 mg. per 100 cc., and unconsciousness usually results when the blood alcohol level reaches 125 to 150 mg.

The duration of the reaction varies from 30 to 60 minutes to several hours in the more severe cases, or as long as there is alcohol in the blood.

DRUG INTERACTIONS: Disulfiram appears to decrease the rate at which certain drugs are metabolized and so may increase the blood levels and the possibility of clinical toxicity of drugs given concomitantly.

Disulfiram should be used with caution in those patients receiving diphenylhydantoin and its congeners, since toxic levels of these antiepileptic agents have been reported during concomitant disulfiram therapy.

It may be necessary to adjust the dosage of oral anticoagulants upon beginning or stopping disulfiram, since disulfiram may prolong prothrombin time.

Patients taking isoniazid when disulfiram is given should be observed for the appearance of unsteady gait or marked changes in mental status and the disulfiram discontinued if such signs appear.

CONCOMITANT CONDITIONS: Because of the possibility of an accidental ANTABUSE-alcohol reaction, ANTABUSE (disulfiram) should be used with extreme caution in patients with any of the following conditions: diabetes mellitus, hypothyroidism, epilepsy, cerebral damage, chronic and acute nephritis, hepatic cirrhosis or insufficiency.

USAGE IN PREGNANCY: The safe use of this drug in pregnancy has not been established. Therefore, ANTABUSE should be used during pregnancy only when, in the judgment of the physician, the probable benefits outweigh the possible risks.

PRECAUTIONS: It is suggested that every patient under treatment carry an Identification Card, stating that he is receiving ANTABUSE and describing the symptoms most likely to occur as a result of the ANTABUSE-alcohol reaction. In addition, this card should indicate the physician or institution to be contacted in emergency. (Cards may be obtained from Ayerst Laboratories upon request.)

Alcoholism may accompany or be followed by dependence on narcotics or sedatives. Barbiturates have been administered concurrently with ANTABUSE (disulfiram) without untoward effects, but the possibility of initiating a new abuse should be considered.

Base line and follow-up transaminase tests (10-14 days) are suggested to detect any hepatic dysfunction that may result with ANTABUSE therapy. In addition, a complete blood count and a sequential multiple analysis-12 (SMA-12) test should be made every six months.

ADVERSE REACTIONS: (See Contraindications, Warnings, and Precautions.)

Occasional skin eruptions are, as a rule, readily controlled by concomitant administration of an antihistaminic drug.

In a small number of patients, a transient mild drowsiness, fatigability, impotence, headache, acneform eruptions, allergic dermatitis, or a metallic or garlic-like aftertaste may be experienced during the first two weeks of therapy. These complaints usually disappear spontaneously with the continuation of therapy or with reduced dosage.

Psychotic reactions have been noted, attributable in most cases to high dosage, combined toxicity (with metronidazole or isoniazid), or to the unmasking of underlying psychoses in patients stressed by the withdrawal of alcohol.

There have been reports of polyneuritis and peripheral neuritis, and rare instances of optic neuritis. One case of cholestatic hapatitis has been reported, but its relationship to ANTABUSE has not been unequivocally established.

DOSAGE AND ADMINISTRATION: ANTABUSE (disulfiram) should never be administered until the patient has abstained from alcohol for at least 12 hours.

INITIAL DOSAGE SCHEDULE: In the first phase of treatment, a maximum of 500 mg. daily is given in a single dose for one to two weeks. Although usually taken in the morning, ANTABUSE may be taken on retiring by patients who experience a sedative effect. Alternatively, to minimize, or eliminate, the sedative effect, dosage may be adjusted downward.

MAINTENANCE REGIMEN: The average maintenance dose is 250 mg. daily (range, 125 to 500 mg.); it should not exceed 500 mg. daily.

NOTE: Occasional patients, while seemingly on adequate maintenance doses of ANTABUSE, report that they are able to drink alcoholic beverages with impunity and without any symptomatology. All appearances to the contrary, such patients must be presumed to be disposing of their tablets in some manner without actually taking them. Until such patients have been observed reliably taking their daily ANTABUSE tablets (preferably crushed and well mixed with liquid), it cannot be concluded that ANTABUSE is ineffective.

DURATION OF THERAPY: The daily, uninterrupted administration of ANTABUSE must be continued until the patient is fully recovered socially and a basis for permanent self-control is established. Depending on the individual patient, maintenance therapy may be required for months or even years.

TRIAL WITH ALCOHOL: During early experience with ANTABUSE, it was thought advisable for each patient to have at least one supervised alcohol-drug reaction. More recently, the test reaction has been largely abandoned. Furthermore, it should never be administered to a patient over 50 years of age. A clear, detailed, and convincing description of the reaction is felt to be sufficient in most cases.

However, where a test reaction is deemed necessary, the suggested procedure is as follows:

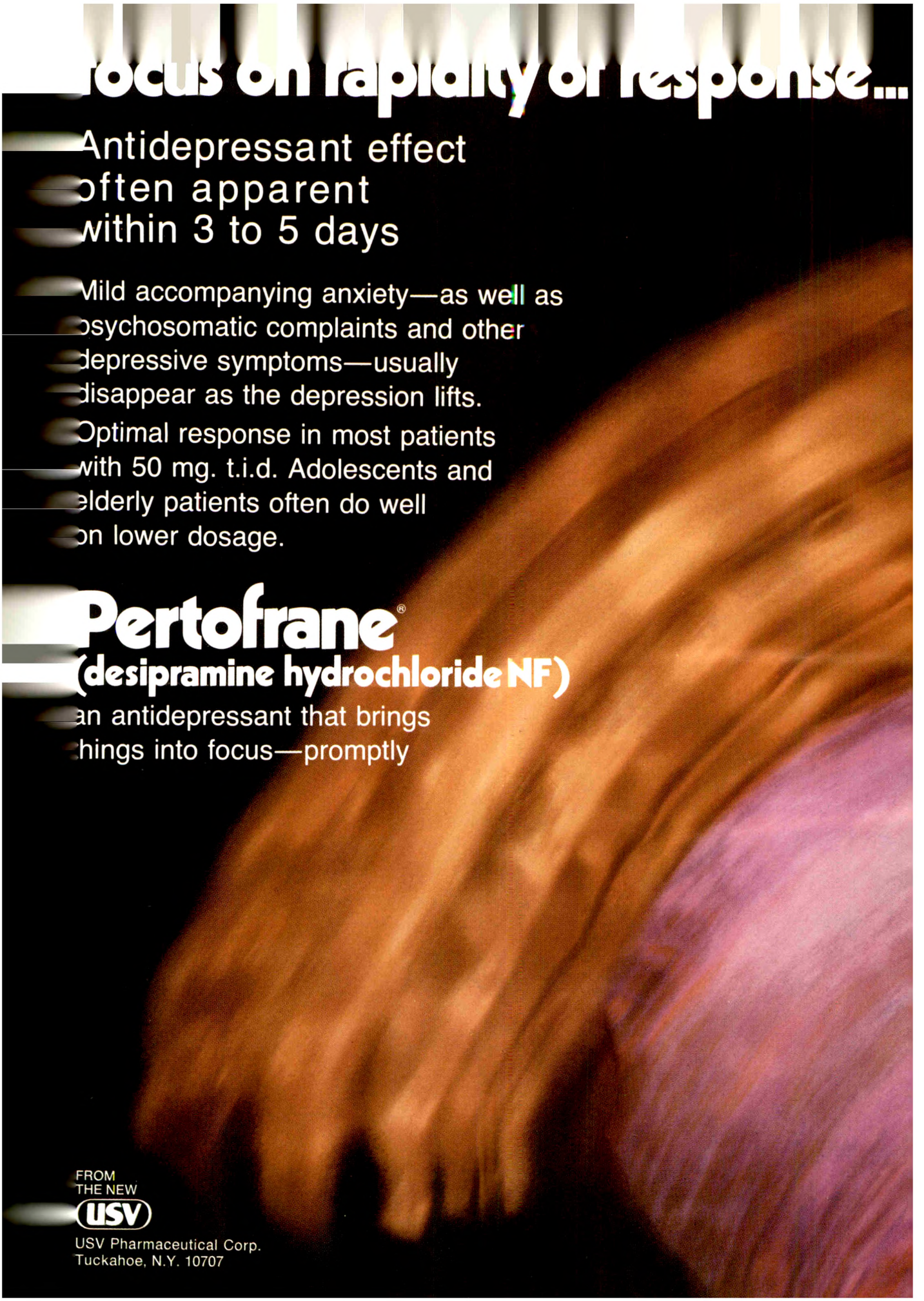
After the first one to two weeks' therapy with 500 mg. daily, a drink of 15 cc. (½ oz.) of 100 proof whiskey or equivalent is taken slowly. This test dose of alcoholic beverage may be repeated once only so that the total dose does not exceed 30 cc. (1 oz.) of whiskey. Once a reaction develops, no more alcohol should be consumed. Such tests should be carried out only when the patient is hospitalized, or comparable supervision and facilities, including oxygen, are available.

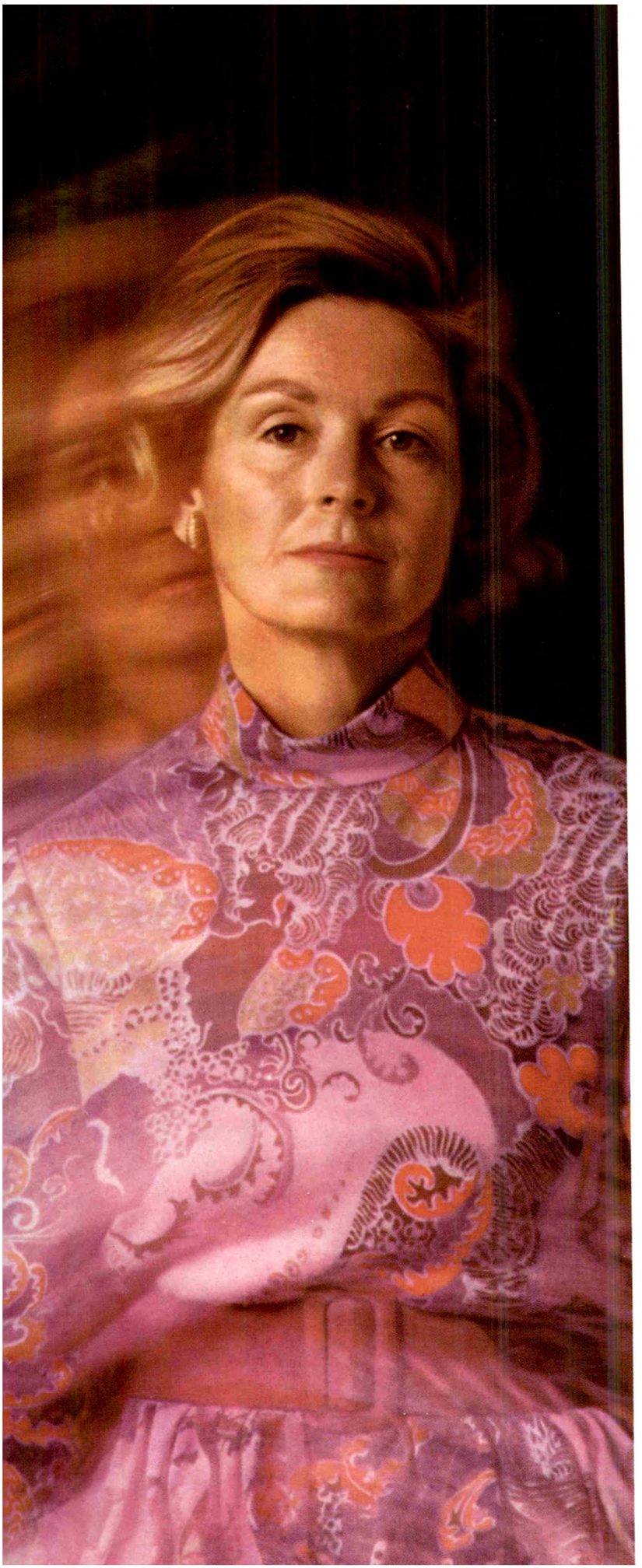
MANAGEMENT OF ANTABUSE (DISULFIRAM)-ALCOHOL REACTION: In severe reactions, whether caused by an excessive test dose or by the patient's unsupervised ingestion of alcohol, supportive measures to restore blood pressure and treat shock should be instituted. Other recommendations include: oxygen, carbogen (95 per cent oxygen and 5 per cent carbon dioxide), vitamin C intravenously in massive doses (1 Gm.), and ephedrine sulfate. Antihistamines have also been used intravenously. Potassium levels should be monitored particularly in patients on digitalis since hypokaliemia has been reported.

HOW SUPPLIED: No. 809—Each tablet (scored) contains 250 mg. disulfiram, in bottles of 100. No. 810—Each tablet (scored) contains 500 mg. disulfiram in bottles of 50 and 1,000.

Ayerst® AYERST LABORATORIES
New York, N.Y. 10017

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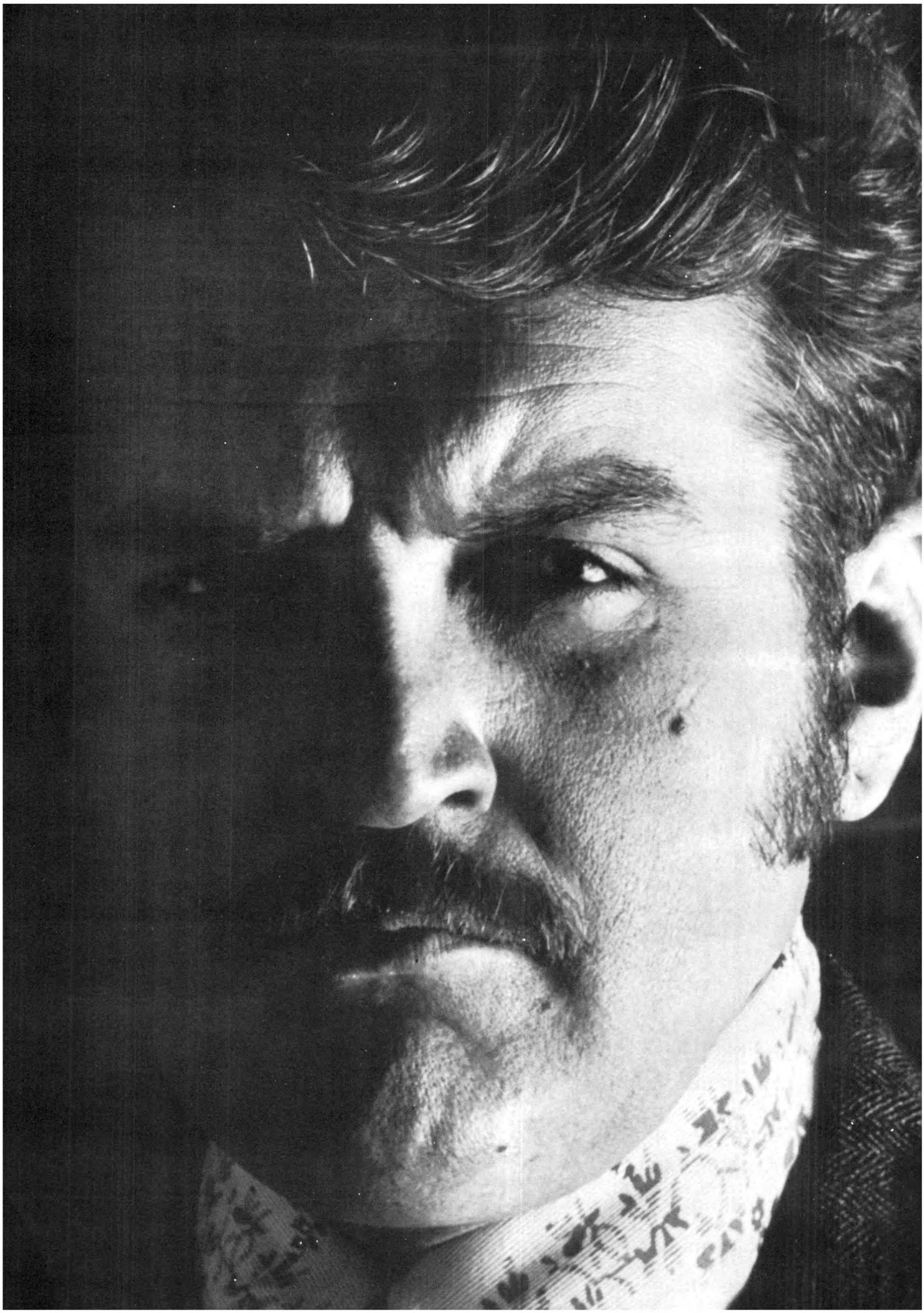

Focus on rapidity of response...
Antidepressant effect often apparent within 3 to 5 days
Mild accompanying anxiety—as well as psychosomatic complaints and other depressive symptoms—usually disappear as the depression lifts.
Optimal response in most patients with 50 mg. t.i.d. Adolescents and elderly patients often do well on lower dosage.
Pertofrane®
(desipramine hydrochloride NF)
an antidepressant that brings things into focus—promptly
FROM THE NEW
USV
USV Pharmaceutical Corp.
Tuckahoe, N.Y. 10707



Pertofrane®
(desipramine hydrochloride)

Indication: For relief of mental depression.
Contraindications: Do not use MAO inhibitors concomitantly or within 2 weeks of the use of this drug. Hyperpyretic crises or severe convulsive seizures may occur with such combinations; potentiation of adverse reactions can be serious or even fatal. When substituting Pertofrane in patients receiving an MAO inhibitor, allow an interval of at least 14 days. Initial dosage in such patients should be low and increases should be gradual and cautiously prescribed. The drug is contraindicated following recent myocardial infarction and in patients with a known hypersensitivity to tricyclic antidepressants. **Warnings:** Activation of psychosis may occasionally be observed in schizophrenic patients. Due to atropine-like effects and sympathomimetic potentiation, use only with the greatest care in patients with narrow-angle glaucoma or urethral or ureteral spasm. Do not use in patients with the following conditions unless the need outweighs the risk: severe coronary heart disease with EKG abnormalities, progressive heart failure, angina pectoris, paroxysmal tachycardia and active seizure disorder (may lower seizure threshold). This drug may block the action of the antihypertensive, guanethidine, and related adrenergic neuron-blocking agents. Hypertensive episodes have been observed during surgery. The concurrent use of other central nervous system drugs or alcohol may potentiate adverse effects. Since many such drugs may be used during surgery, desipramine should be discontinued prior to elective procedures. Caution patients on the possibility of impaired ability to operate a motor vehicle or dangerous machinery. Do not use in women who are or may become pregnant, or in children under 12 years of age, unless the clinical situation warrants the potential risk. Because of increased sensitivity to the drug, use lower than normal dosage in adolescent and geriatric patients. **Precautions:** Potentially suicidal patients require careful supervision and protective measures during therapy. Prescriptions should be limited to small quantities. Discontinuation of the drug may be necessary in the presence of increased agitation and anxiety shifting to hypomanic or manic excitement. Atropine-like effects may be more pronounced (e.g. paralytic ileus) in susceptible patients and in those receiving anticholinergic drugs (including antiparkinsonism agents). Prescribe cautiously in hyperthyroid patients and in those receiving thyroid medications; transient cardiac arrhythmias have occurred in rare instances. Periodic blood and liver studies should supplement careful clinical observations in all patients undergoing extended courses of therapy. **Adverse Reactions:** The following have been reported: *Nervous System:* dizziness, drowsiness, insomnia, headache, disturbed visual accommodation, tremor, unsteadiness, tinnitus, paresthesias, changes in EEG patterns, epileptiform seizures, mild extrapyramidal activity, falling and neuromuscular incoordination. A confusional state (with such symptoms as hallucinations and disorientation), particularly in older patients and at higher dosage, may require discontinuation of the drug. *Gastrointestinal Tract:* anorexia, dryness of the mouth, nausea, epigastric distress, constipation and diarrhea. *Skin:* skin rashes (including photosensitization), perspiration and flushing sensations. *Liver:* rare cases of transient jaundice (apparently of an obstructive nature) and liver damage. If jaundice or abnormalities in liver function tests occur, discontinue the drug and investigate. *Blood Elements:* bone-marrow depression, agranulocytosis, thrombocytopenia and purpura. If these occur, discontinue the drug. Transient eosinophilia has been observed. *Cardiovascular System:* orthostatic hypotension and tachycardia. Carefully supervise patients requiring concomitant vasodilating therapy, particularly during initial phases. *Genitourinary System:* urinary frequency or retention and impotence. *Endocrine System:* occasional hormonal effects, including gynecomastia, galactorrhea and breast enlargement, and decreased libido and estrogenic effect. *Sensitivity:* urticaria and rare instances of drug fever and cross-sensitivity with imipramine.
Dosage: All patients except geriatric and adolescent: 50 mg. t.i.d. (150 mg. daily). Dosage may be increased up to 200 mg. daily. Geriatric and adolescent patients should usually be started with lower dosage (25 to 50 mg. daily) and may not tolerate higher doses. Dosage may be increased up to 100 mg. daily. Lower maintenance dosages should be continued for at least 2 months after obtaining a satisfactory response. Mild anxiety and agitation which may accompany depression usually remit as the depression responds. Occasionally, however, a sedative or tranquilizer may be indicated. **How Supplied:** 25 mg. capsules (pink) and 50 mg. capsules (maroon and pink), bottles of 100 and 1000; single-dose blister packs, boxes of 500.

USV Pharmaceutical Corp., Tuckahoe, N.Y. 10707



The hostile patient.

He vacillates from suspiciousness to rage.
His disorientation is apparent through
his erratic outbursts against imagined enemies.

His irrational behavior worries his family.
And hinders your treatment.
How do you reach him?

Very possibly, with QUIDE (piperacetazine).

Clinical studies of schizophrenic patients on a regimen of QUIDE have demonstrated moderate to excellent improvement in mental status and remission of hyperactive, combative behavior. Improvement in interpersonal relationships and adjustment to therapy were especially notable.

In clinical evaluation, although extrapyramidal reactions did occur, the low incidence of these reactions allowed for patient cooperation.

When Parkinsonism did occur, it was easily controlled by modification of dosage or, infrequently, the addition of an anti-Parkinson agent. Photosensitivity rarely occurred.

QUIDE (piperacetazine) . . . it may well be what some of your patients are waiting for.

Quide® tablets
piperacetazine

DOW **DOW PHARMACEUTICALS** The Dow Chemical Company Indianapolis, Indiana

See next page for complete prescribing information.

Quide® tablets piperacetazine

DESCRIPTION: QUIDE (piperacetazine) is a piperidine derivative of phenothiazine.

Piperacetazine has the following chemical designation: 10- { 3-[4-(2-Hydroxyethyl)-piperidino]propyl } phenothiazin-2-yl Methyl Ketone.

ACTIONS: The exact mode of action of the phenothiazines is unclear, but drugs of this class produce changes at all levels of the central nervous system, as well as on multiple organ systems.

INDICATIONS: QUIDE is indicated for use in the management of the manifestations of psychotic disorders.

CONTRAINDICATIONS: QUIDE is contraindicated in patients who are comatose or markedly depressed from any cause and in the presence of preexisting thrombocytopenia and other blood dyscrasias, bone marrow depression and in patients with significant liver disease. QUIDE is contraindicated in women who are or may become pregnant since animal reproductive studies adequate to establish safety during pregnancy have not been carried out. QUIDE is contraindicated in patients who have shown hypersensitivity to the drug. Cross sensitivity between phenothiazine derivatives may occur.

WARNING: Like other phenothiazines, QUIDE may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks such as driving a car or operating machinery, especially during the first few days of therapy. Therefore, patients should be cautioned accordingly. Concomitant use with alcohol should be avoided due to the potential additive effect. Patients with known suicidal tendencies should not be given QUIDE except under strict medical supervision.

Use in Children: The use of QUIDE in children under 12 years of age is not recommended because safe conditions for its use have not been established.

PRECAUTIONS: Use with caution in persons who:

1. are receiving barbiturates or narcotics, because of additive effects on central nervous system depression. The dosage of the narcotic or barbiturate should be reduced when given concomitantly with QUIDE.
2. are receiving atropine or related drugs, because of additive anticholinergic effects.
3. have a history of epilepsy, because this drug may lower the convulsive threshold. Adequate anticonvulsant therapy must be maintained concomitantly.
4. are exposed to extreme heat or phosphorous insecticides.
5. have a history of peptic ulcer. Aggravation of preexisting ulcer has occurred.
6. have cardiovascular disease.
7. have respiratory impairment due to acute pulmonary infections or chronic respiratory disorders such as severe asthma or emphysema.

Keep in mind that the antiemetic effect may mask the toxicity of other drugs or obscure the diagnosis of such conditions as intestinal obstruction or brain tumor.

Any sign of blood dyscrasias requires immediate discontinuance of the drug and the institution of appropriate therapy.

The possibility of liver damage, pigmentary retinopathy, lenticular or corneal deposits, and development of irreversible dyskinesias should be kept in mind when patients are on prolonged therapy.

Abrupt Withdrawal: In general, phenothiazines do not produce psychic dependence, but gastritis, nausea and vomiting, dizziness and tremulousness have been reported following abrupt cessation of high-dose therapy. Reports suggest that these symptoms can be reduced if concomitant antiparkinson agents are continued for several weeks after the phenothiazine is withdrawn.

ADVERSE REACTIONS: Not all of the following adverse reactions have been reported with QUIDE (piperacetazine), but pharmacological similarities among various phenothiazine derivatives require that each be considered.

Note: Sudden Death has occasionally been reported in patients who have received phenothiazines. In some cases death was apparently due to cardiac arrest, in others the cause appeared to be asphyxia due to failure of the cough reflex. In some patients the cause could not be determined, nor could it be established that death was due to the phenothiazine.

Drowsiness: May occur particularly during the first or second week, after which it generally disappears. If troublesome, lower the dosage.

Jaundice: Incidence is low. When it occurs (usually between the second and fourth weeks of therapy) it is generally regarded as a sensitivity reaction. The clinical picture resembles infectious hepatitis with laboratory features of obstructive jaundice. It is usually reversible although chronic jaundice has been reported with phenothiazine therapy.

Hematological Disorders: Agranulocytosis, eosinophilia, leukopenia, hemolytic anemia, thrombocytopenia purpura and pancytopenia.

Agranulocytosis: Most cases have occurred between the fourth and tenth weeks of therapy. Patients should be watched closely during that period for the sudden appearance of sore throat or other signs of infection. If white blood count and differential show significant cellular depression, discontinue the drug and start appropriate therapy. A slightly lowered white count, however, is not in itself an indication to discontinue the drug.

Cardiovascular: Postural hypotension, tachycardia (especially following rapid increase in dosage), bradycardia, cardiac arrest, faintness and dizziness. Occasionally the hypotensive effect may produce a shock-like condition. In the event a vasoconstrictor is required, levarterenol and phenylephrine are the most suitable. Other pressor agents, including epinephrine, should not be used because a paradoxical further lowering of the blood pressure may ensue.

EKG changes, nonspecific, usually reversible, have been observed in some patients receiving phenothiazine tranquilizers. Their relationship to myocardial damage has not been confirmed.

CNS Effects: Neuromuscular (extrapyramidal) Reactions: These are usually dose related and take three forms: (1) pseudoparkinsonism; (2) akathisia; and (3) dystonias (Dystonias include spasms of the neck muscles, extensor rigidity of back muscles, carpopedal spasm, eyes rolled back, convulsions, trismus and swallowing difficulties). These resemble serious neurological disorders but usually subside within 48 hours. Management of the extrapyramidal symptoms, depending upon the type and severity, includes sedation, injectable diphenhydramine, and the use of antiparkinsonism agents.

Hyperreflexia has been reported in the newborn when a phenothiazine was used during pregnancy.

Persistent Tardive Dyskinesia: As with all antipsychotic agents, tardive dyskinesia may appear in some patients on long-term therapy or may appear after drug therapy has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. The symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movements of the tongue, face, mouth or jaw (e.g., protrusion of tongue, puffing of cheeks, puckering of the mouth, chewing movements). Sometimes these may be accompanied by involuntary movements of extremities.

There is no known effective treatment for tardive dyskinesia; anti-parkinsonism agents usually do not alleviate the symptoms of this syndrome. It is suggested that all antipsychotic agents be discontinued if these symptoms appear. Should it be necessary to reinstitute treatment, or increase the dosage of the agent, or switch to a different antipsychotic agent, the syndrome may be masked.

It has been reported that fine vermicular movements of the tongue may be an early sign of the syndrome and if the medication is stopped at that time the syndrome may not develop.

Other CNS Effects: Cerebral edema. Abnormality of cerebral spinal fluid proteins. Convulsive seizures, particularly in patients with EEG abnormalities or a history of such disorders. Hyperpyrexia.

Adverse Behavioral Effects: Paradoxical exacerbation of psychotic symptoms.

Allergic Reactions: Urticaria, itching, erythema, photosensitivity (avoid undue exposure to the sun), eczema. Severe reactions include: exfoliative dermatitis (rare); contact dermatitis in nursing personnel administering the drug; asthma; laryngeal edema; angioneurotic edema; and anaphylactoid reactions.

Endocrine Disorders: Lactation and moderate breast engorgement in females and gynecomastia in males on large doses; changes in libido; false-positive pregnancy tests; amenorrhea; hyperglycemia, hypoglycemia, glycosuria.

Autonomic Reactions: Dry mouth, nasal congestion, constipation, adynamic ileus, myosis, mydriasis, urinary retention.

Special Considerations in Long-term Therapy: After prolonged administration of phenothiazines, pigmentation of the skin has occurred chiefly in the exposed areas, especially in females on large doses. Ocular changes consisting of deposition of fine particulate matter in the cornea and lens, progressing in more severe cases to star-shaped lenticular opacities; epithelial keratopathies; pigmentary retinopathy.

Other Adverse Reactions: Increases in appetite and weight; peripheral edema.

DOSAGE AND ADMINISTRATION: Dosage should be individualized, not only initially but during the course of therapy, and the minimal effective dose should always be employed. A starting dosage of 10 mg. two to four times daily is recommended for adults. The dose may be increased up to 160 mg. daily within a three to five day period. Should side effects occur, dosage should be reduced or discontinued as indicated. For maintenance therapy, up to 160 mg. daily in divided doses may be given.

OVERDOSAGE WITH PHENOTHIAZINES:
Manifestations: One of three clinical pictures may be seen.

1. Extreme somnolence; patient can usually be roused with prodding, but if permitted will fall asleep. General condition is usually satisfactory. The skin, though pale, is warm and dry. Slight blood pressure, respiratory and pulse changes may occur but are not problems.
2. Mild to moderate drop in blood pressure (patient may be conscious or unconscious). Skin is markedly gray but warm and dry. Nail beds are pink. Respiration is slow and regular. Pulse is strong but rate slightly increased.
3. Severe hypotension, possibly accompanied by weakness, cyanosis, perspiration, rapid thready pulse and respiratory depression.

Treatment: Is essentially symptomatic and supportive. Early gastric lavage and intestinal purges may help. Centrally acting emetics may not help because of the possible antiemetic effect of QUIDE. Give hot tea or coffee. Severe hypotension usually responds to measures described under hypotensive effects (see ADVERSE REACTIONS: *Cardiovascular*). Additional measures include pressure bandages to lower limbs, oxygen and I.V. fluids.

Avoid stimulants that may cause convulsions (e.g., picrotoxin and pentylenetetrazol).

Limited experience with dialysis indicates that it is not helpful.

CAUTION: Federal law prohibits dispensing without prescription.

HOW SUPPLIED:

QUIDE (piperacetazine) Tablets—10 mg. (orange)—bottles of 100 (NDC 183-52-2), and bottles of 1000 (NDC 183-52-4).

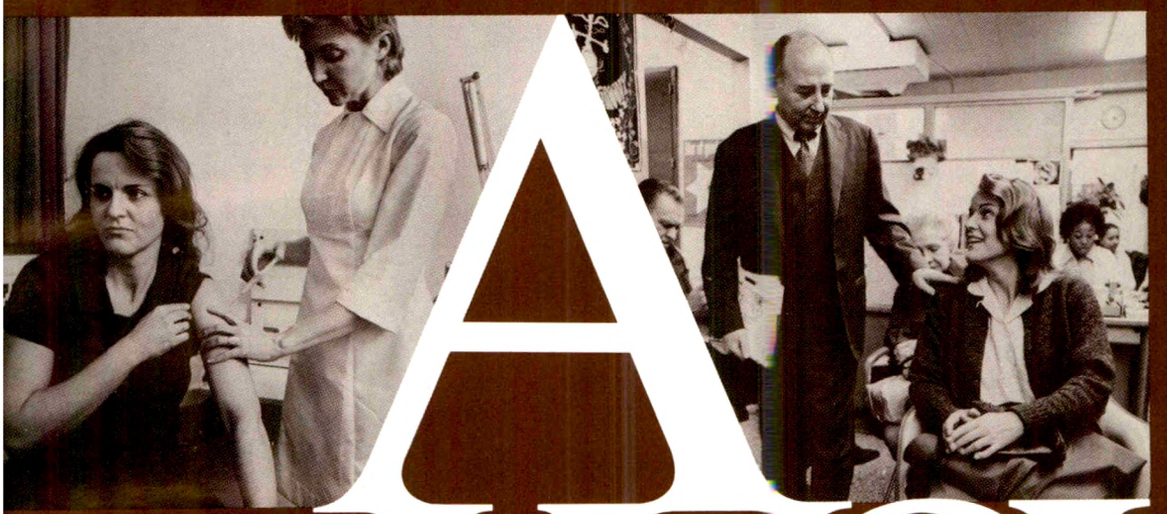
QUIDE (piperacetazine) Tablets—25 mg. (yellow)—bottles of 100 (NDC 183-53-2), and bottles of 1000 (NDC 183-53-4).

Note: Dispense only in light-resistant containers; the coatings on these tablets contain light-sensitive colors.

January 1973

DOW **DOW PHARMACEUTICALS** The Dow Chemical Company Indianapolis, Indiana

For schizophrenic patients...



A way out:



...that helps keep them out

Controlled Drug Delivery

with new

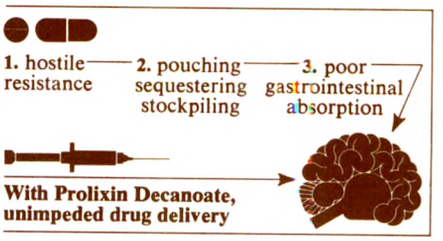
PROLIXIN® DECANOATE
(FLUPHENAZINE DECANOATE INJECTION)

Puts control of the schizophrenic in your hands with injections 1 to 3 weeks apart or longer with an average duration of effect of about 2 weeks

Controlled drug delivery—a revolution in patient management

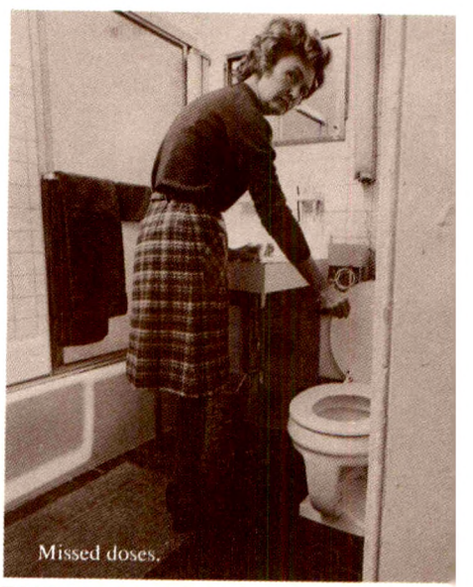
PROLIXIN® DECANOATE (Fluphenazine Decanoate Injection) HELPS ASSURE EFFECTIVE, UNHINDERED MEDICATION

Controlled drug delivery is *physician*-controlled delivery, an effective prophylactic maneuver against disruption of therapy—one of the most common causes of psychotic relapse. Is the patient taking his medication? You know because you administer it or direct others to. Once administered, therapy cannot be altered by the patient, by his family, or by anyone else.



In most patients, symptomatology is controlled by Prolixin Decanoate for periods of two weeks with a single injection. Sequestered medication and similar problems associated with oral therapy are not encountered. Nor does the patient risk drug loss through severe diarrhea or poor gastrointestinal absorption. Prolixin Decanoate keeps the patient medicated...helps make him more amenable to the entire treatment program and improves his chances for rehabilitation and discharge.

The outpatient is vulnerable to the dictates of his own poor judgment. Deluded by a sense of well-being, he may question the need for medication. Family and friends often give him misleading advice. Oral therapy in such a patient encourages missed doses. Medication with Prolixin Decanoate (Fluphenazine Decanoate Injection) helps assure drug delivery when required and in the dosage prescribed. It helps keep the outpatient out.



FOUR REASONS FOR READMISSION...

For brief summary, see last page of this presentation.

)LIXIN® DECANOATE
phenazine Decanoate Injection)
URES ECONOMIC DRUG
LIVERY...LESS FREQUENT
SING THAN WITH ORAL
ERAPY

ontrolled drug delivery brings cost
ıerapy down with less hospitaliza-
, less nursing time, less frequent
ng. Low annual dosage means less
for the hospital, for the patient's
ily, and for the community. It
ns a minimum of drug holidays to
d long-term complications, with
· confusing schedules for patient
family.

trolled drug delivery—
volution in the treatment of the
zophrenic patient

)LIXIN® DECANOATE
phenazine Decanoate Injection)
LPS ENHANCE LIKELIHOOD
DISCHARGE

)ptimally, the mental hospital
ıld be a rehabilitating bridge be-
n life before and life after custo-
care. Prolixin Decanoate often
tens that bridge because getting the
tient out is frequently a matter of
)ing him medicated. And 1 injec-
of Prolixin Decanoate means ap-
ximately 2 weeks of symptom
rol. The importance of control by
physician with this injectable can
een in the fact that about 1 out of
y 5 inpatients does not take his tab-
even when they are administered by nursing staff. With controlled drug delivery, lost or hidden doses are not a problem.

In one study,[1] 24 chronic long-term hospital patients were treated with Prolixin Decanoate in dosages of 12.5 mg. to 75 mg. given every 7 days to 3 weeks. Most of the patients received 25 to 50 mg. per injection. Of these, 13 were discharged after 6 months of treatment, 4 were considered dischargeable, and 7 did not improve. In 12 of the 24 patients who previously had been on different psychotropic drugs for periods of 4 to 96 weeks, improvement with Prolixin Decanoate (Fluphenazine Decanoate Injection) was observed in affect, volition, and higher mental functions. Dischargeability in these patients "may also have been enhanced because the staff, the patient, and the family were assured of an adequate and regular medication intake."[1]

Controlled drug delivery—
a revolution in the care of the outpatient

PROLIXIN® DECANOATE
(Fluphenazine Decanoate Injection)
PROMOTES CONTINUITY OF MEDICATION WITH DIMINISHED LIKELIHOOD OF RELAPSE COMPARED WITH ORAL THERAPY

Success in rehabilitative areas like employment and social acceptance depends in large measure on adequate and continuing phenothiazine intake; success in family adjustment no less so. Short-acting medication is not the best path to such success. According to one report,[2] "approximately 50% of all discharged psychotic patients fail to take even the first dose of their outpatient medication." And McClellan and Cowan[3] state that a substantial number of patients taking antipsychotic drugs do so in amounts significantly less than those prescribed. Even once-daily administration does not solve the problem of poor home supervision or the patient's lack of insight into his condition.

Controlled drug delivery with Prolixin Decanoate (Fluphenazine Decanoate Injection) is an efficient route to continuity of medication, and therefore to long-term remission. For one thing there is less strain on the patient's often tenuous adjustment to family living. Since family members are not responsible for supervising the patient's medical needs, they tend to be more accepting, and better feeling is promoted merely because the controlled delivery regimen demonstrates that improvement is possible. Controlled drug delivery also strengthens the patient's psychological defenses. He is not reminded of his psychiatric illness by multiple daily doses.

The same unique advantages of controlled drug delivery with Prolixin Decanoate that promote the discharge-

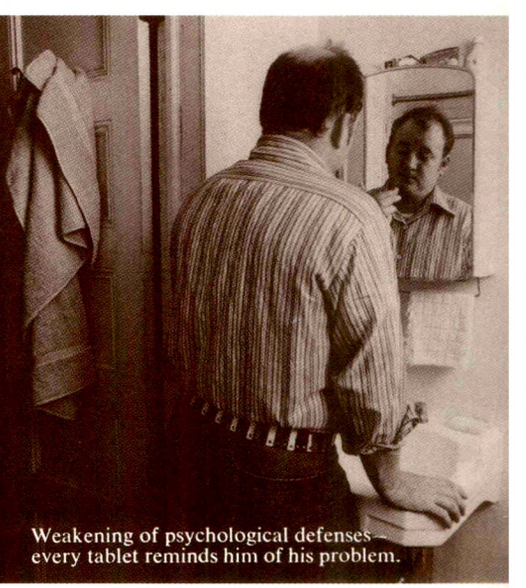
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kpiling.



Misleading advice from family and friends.



Weakening of psychological defenses—every tablet reminds him of his problem.

)D REASONS FOR CONTROLLED DRUG DELIVERY

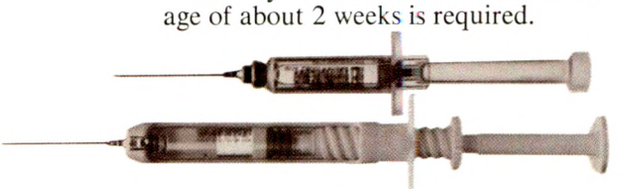
(Continued from preceding page)
ability of the inpatient and help maintain him in the community are true for the patient who has never been hospitalized. It is just these advantages that will help the physician or psychiatrist keep him in the community without the need for custodial care.

Controlled drug delivery—a revolution in efficiency of administration

PROLIXIN® DECANOATE (Fluphenazine Decanoate Injection) SAVES TIME, REDUCES COST IN THE HOSPITAL, CLINIC, OFFICE

Controlled drug delivery saves time, reduces costs in the hospital. With Prolixin Decanoate there can be no palming, pouching, regurgitating. With Prolixin Decanoate resistance to therapy dwindles. With symptoms controlled, the patient is more manageable, more comfortable, more amenable to the total hospital treatment program. With Prolixin Decanoate only 1 dose visit every 1 to 3 weeks with an average of about 2 weeks is required.





Controlled drug delivery saves time, reduces costs in the clinic and office.

With Prolixin Decanoate less frequ dosing. With Prolixin Decanoate (phenazine Decanoate Injection) n patients report for their injections c once in every 2-week period.

18 PATIENTS	18 PATIENTS
	
8 a.m. ¾ hr. 2 p.m. ¾ hr. 6 p.m. ¾ hr.	1 injection every 14 days f most patients
=2¼ hrs. nursing time	4 minutes required for ea injection (appro
2¼ hrs. × 14 days **=31½ hrs. of nursing time every 14 days**	**=1 hr. 10 minu nursing time in 14 days**
NURSING TIME SAVED IN 14 DA 30 hours, 20 minutes[4]	

Controlled drug delivery—a revolution in convenience of administration

PROLIXIN® DECANOATE (Fluphenazine Decanoate Injectio MAY BE DELIVERED IN EASY-TO-USE UNIMATIC® SYRINGES

Prolixin Decanoate may be g intramuscularly or subcutaneo Local tissue reactions occur only ra

A dry syringe and needle of at l 21 gauge should be used. Use of a needle or syringe may cause the tion to become cloudy. Prolixin D noate is available in vials of 5 cc. in Unimatic single-dose preassem syringes and in Unimatic cartr needle units with a reusable-pl holder.

N.B. Extrapyramidal reaction cur frequently. Most often they a versible and can usually be contr by administration of antiparkinso drugs. However, in some insta they are persistent (see Adverse actions section of Brief Summ Patients should be forewarned reassured.

Reference: 1. Keskiner, A. et al.: Arch. Psychiatry 18:477, Apr. 1968. 2. Gol H. L., DiMascio, A. and Chaudhary, B chosomatics 11:173, May-June 1970. 3 Clellan, T. A. and Cowan, G.: BR COMMUNICATIONS. Am. J. Psych 126:1771, June 1970. 4. Platt, R.: Br. J Psychiatry 2:187, 1968.

For Brief Summary, see opposite p

Controlled Drug Delivery

in schizophrenia with new

PROLIXIN® DECANOATE

(FLUPHENAZINE DECANOATE INJECTION)

IEF SUMMARY

lixin Decanoate (Fluphenazine Decanoate ction) provides 25 mg. fluphenazine deca- te per cc. in a sesame oil vehicle with % (w/v) benzyl alcohol as a preservative.

NTRAINDICATIONS: In presence of sus- ted or established subcortical brain dam- . In patients who have a blood dyscrasia, r damage or renal insufficiency, or who are iving large doses of hypnotics, or who are natose or severely depressed. In patients o have shown hypersensitivity to fluphena- e; cross-sensitivity to phenothiazine deriva- s may occur.

Not intended for use in children under 12.

RNINGS: Mental and physical abilities re- ed for driving a car or operating heavy chinery may be impaired by use of this g. Physicians should be alert to the possi- ty that severe adverse reactions may occur ich require immediate medical attention. entiation of effects of alcohol may occur. ety for use during pregnancy has not been ablished; weigh possible hazards against ential benefits if administered during gnancy.

ECAUTIONS: Caution must be exercised nother phenothiazine compound caused olestatic jaundice, dermatoses or other al- gic reactions because of the possibility of ss-sensitivity. When psychotic patients on ge doses of a phenothiazine drug are to un- go surgery, hypotensive phenomena should watched for; less anesthetics or central ner- us system depressants may be required. Be- se of added anti-cholinergic effects, fluphen- ne may potentiate the effects of atropine.

Use fluphenazine decanoate cautiously in ients exposed to extreme heat or phospho- insecticides; in patients with ulcer disease tory since aggravation of peptic ulcer has urred; in patients with history of convul- e disorders since grand mal convulsions ve occurred; and in patients with special dical disorders such as mitral insufficiency other cardiovascular diseases, and pheo- romocytoma. Bear in mind that with pro- nged therapy there is the possibility of liver mage, pigmentary retinopathy, lenticular d corneal deposits, and development of irre- sible dyskinesia.

Fluphenazine decanoate should be adminis- ed under the direction of a physician experi- ced in the clinical use of psychotropic drugs. riodic checking of hepatic and renal func- ns and blood picture should be done. Renal nction of patients on long-term therapy ould be monitored; if BUN becomes abnor- al, treatment should be discontinued. "Silent eumonias" are possible.

DVERSE REACTIONS: *Central Nervous stem*—Extrapyramidal symptoms are most frequently reported. These include pseudoparkinsonism, dystonia, dyskinesia, akathisia, oculogyric crises, opisthotonos, and hyperreflexia; most often these are reversible, but they may be persistent. One can expect a higher incidence of such reactions with fluphenazine decanoate than with less potent piperazine derivatives or straight-chain phenothiazines. The incidence and severity will depend more on individual patient sensitivity, but dosage level and patient age are also determinants. As these reactions may be alarming, the patient should be forewarned and reassured. These reactions can usually be controlled by administration of anti-parkinsonian drugs such as benztropine mesylate or intravenous Caffeine and Sodium Benzoate Injection U.S.P., and by subsequent reduction in dosage. A persistent and sometimes irreversible pseudo-parkinsonian syndrome may develop with chronic administration of phenothiazine compounds. Rhythmic, stereotyped dyskinetic involuntary movements, particularly of the face, mouth, tongue and jaw occur, and may be accompanied by choreiform movements of the limbs. The symptoms persist after drug withdrawal. Antiparkinsonian agents are seldom of benefit. The risk appears to be greatest in elderly females with organic brain damage receiving large and prolonged doses. Phenothiazine derivatives have been known to cause restlessness, excitement, or bizarre dreams and reactivation or aggravation of psychotic processes may be encountered. If drowsiness or lethargy occur, the dosage may have to be reduced. Dosages, far in excess of the recommended amounts, may induce a catatonic-like state.

Autonomic Nervous System—Hypertension and fluctuations in blood pressure have been reported. Although hypotension is rarely a problem, patients with pheochromocytoma, cerebral vascular or renal insufficiency or severe cardiac reserve deficiency such as mitral insufficiency appear to be particularly prone to this reaction and should be observed carefully. Supportive measures including intravenous vasopressor drugs should be instituted immediately should severe hypotension occur; Levarterenol Bitartrate Injection U.S.P. is the most suitable drug; *epinephrine should not be used* since phenothiazine derivatives have been found to reverse its action. Nausea, loss of appetite, salivation, polyuria, perspiration, dry mouth, headache and constipation may occur. Reducing or temporarily discontinuing the dosage will usually control these effects. Blurred vision, glaucoma, bladder paralysis, fecal impaction, paralytic ileus, tachycardia or nasal congestion have occurred in some patients on phenothiazine derivatives.

Metabolic and Endocrine—Weight change, peripheral edema, abnormal lactation, gynecomastia, menstrual irregularities, false results on pregnancy tests, impotency in men and increased libido in women have occurred in some patients on phenothiazine therapy.

Allergic Reactions—Itching, erythema, urticaria, seborrhea, photosensitivity, eczema and exfoliative dermatitis have been reported with phenothiazines. The possibility of anaphylactoid reactions should be borne in mind.

Hematologic—Blood dyscrasias including leukopenia, agranulocytosis, thrombocytopenic or nonthrombocytopenic purpura, eosinophilia, and pancytopenia have been observed with phenothiazines. If soreness of the mouth, gums or throat or any symptoms of upper respiratory infection occur and confirmatory leukocyte count indicates cellular depression, therapy should be discontinued and other appropriate measures instituted immediately.

Hepatic—Liver damage manifested by cholestatic jaundice, particularly during the first months of therapy, may occur; treatment should be discontinued. A cephalin flocculation increase, sometimes accompanied by alterations in other liver function tests, has been reported in patients who have had no clinical evidence of liver damage.

Others—Sudden deaths have been reported in hospitalized patients on phenothiazines. Previous brain damage or seizures may be predisposing factors. High doses should be avoided in known seizure patients. Shortly before death, several patients showed flare-ups of psychotic behavior patterns. Autopsy findings have usually revealed acute fulminating pneumonia or pneumonitis, aspiration of gastric contents, or intramyocardial lesions. Although not a general feature of fluphenazine, potentiation of central nervous system depressants such as opiates, analgesics, antihistamines, barbiturates, and alcohol may occur.

Hypotension severe enough to cause fatal cardiac arrest, altered electrocardiographic and electroencephalographic tracings, altered cerebrospinal fluid proteins, cerebral edema, asthma, laryngeal edema, and angioneurotic edema; with long-term use, skin pigmentation and lenticular and corneal opacities have occurred with phenothiazines. Local tissue reactions occur only rarely with injections of fluphenazine decanoate.

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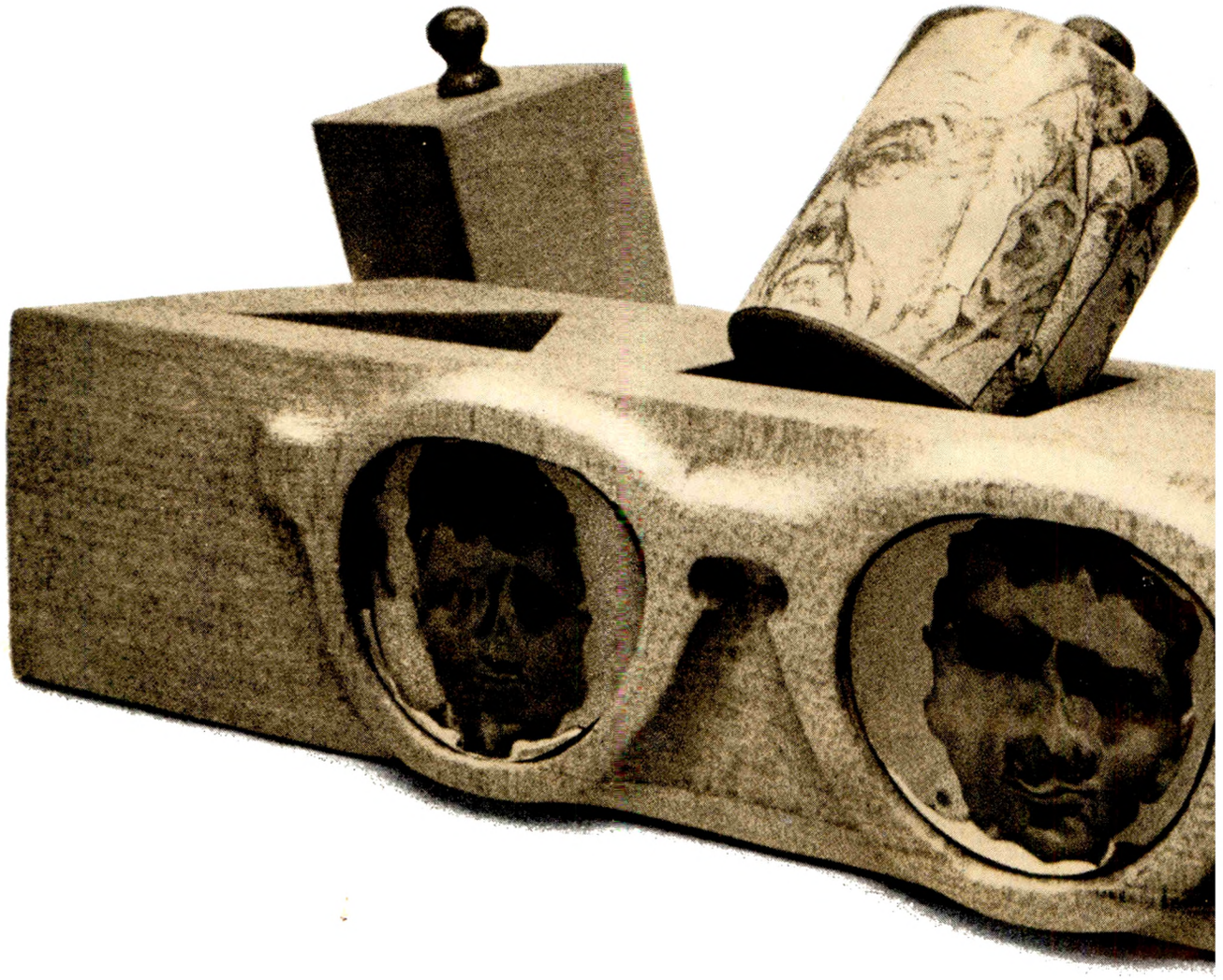
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in the elderly), hallucinations, disorientation, delusions; anxiety, agitation; insomnia and nightmares; hypomania; exacerbation of psychosis. *Neurological:* paresthesias of extremities; incoordination, ataxia, tremors, peripheral neuropathy; extrapyramidal symptoms; seizures; alteration in EEG patterns; tinnitus. *Anticholinergic:* dry mouth, and rarely associated sublingual adenitis; blurred vision, disturbance of accommodation, mydriasis; constipation, paralytic ileus; urinary retention, delayed micturition, hypotonic bladder. *Allergic:* skin rash, petechiae, urticaria, itching, photosensitization, edema (of face and tongue or general), drug fever. *Hematologic:* agranulocytosis, eosinophilia, purpura, thrombocytopenia. *Gastrointestinal:* anorexia, nausea and vomiting, epigastric distress, peculiar taste, abdominal cramps, diarrhea, stomatitis, black tongue. *Endocrine:* gynecomastia; breast enlargement and galactorrhea in the female; increased or decreased libido, impotence, testicular swelling; elevation or depression of blood sugar levels. *Other:* jaundice (simulating obstructive), altered liver function; weight gain or loss; perspiration, flushing; urinary frequency, nocturia; parotid swelling; drowsiness, dizziness, weakness and fatigue, headache; alopecia. *Withdrawal Symptoms:* Though not indicative of addiction, abrupt cessation after prolonged therapy may produce nausea, headache and malaise.

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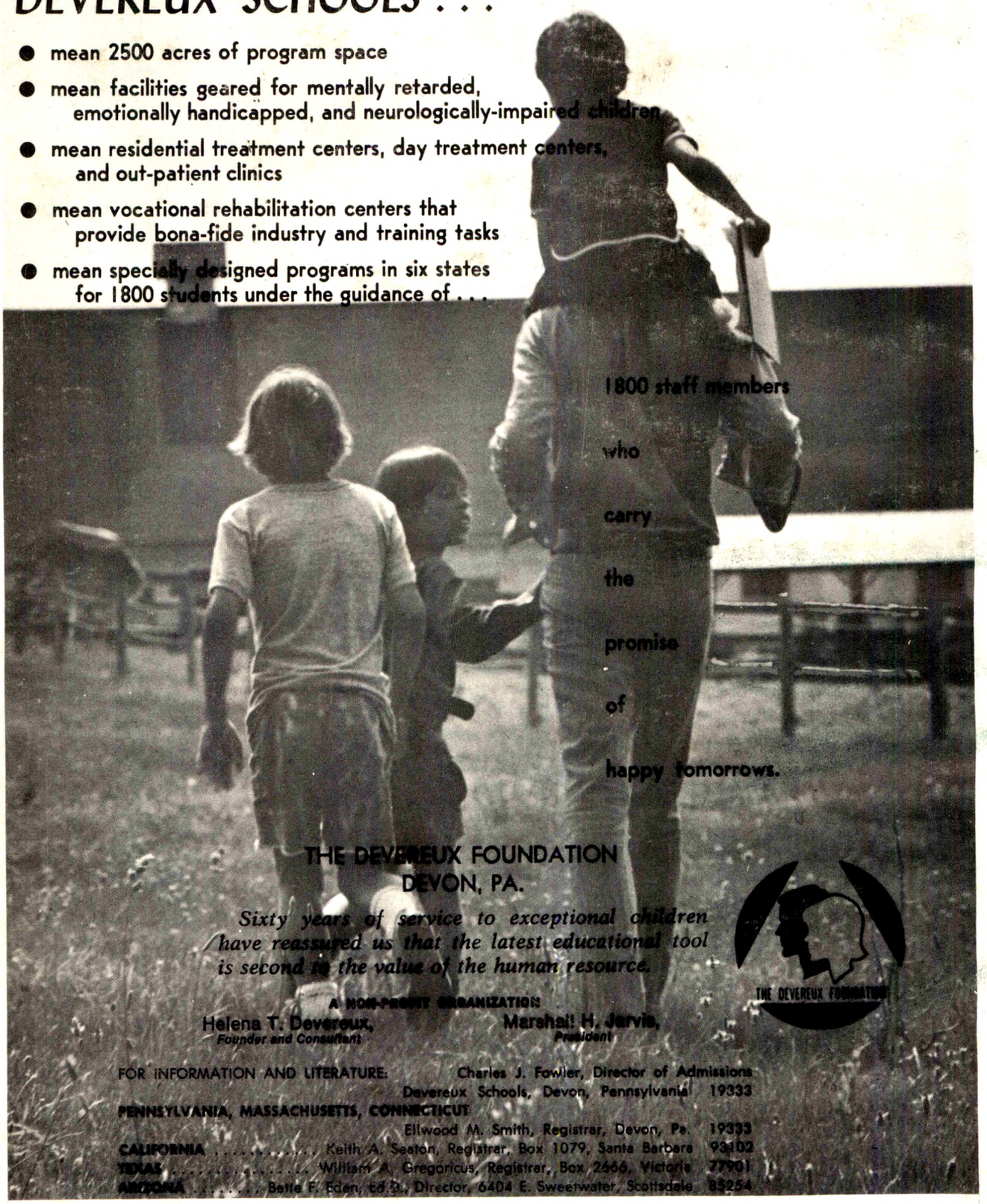
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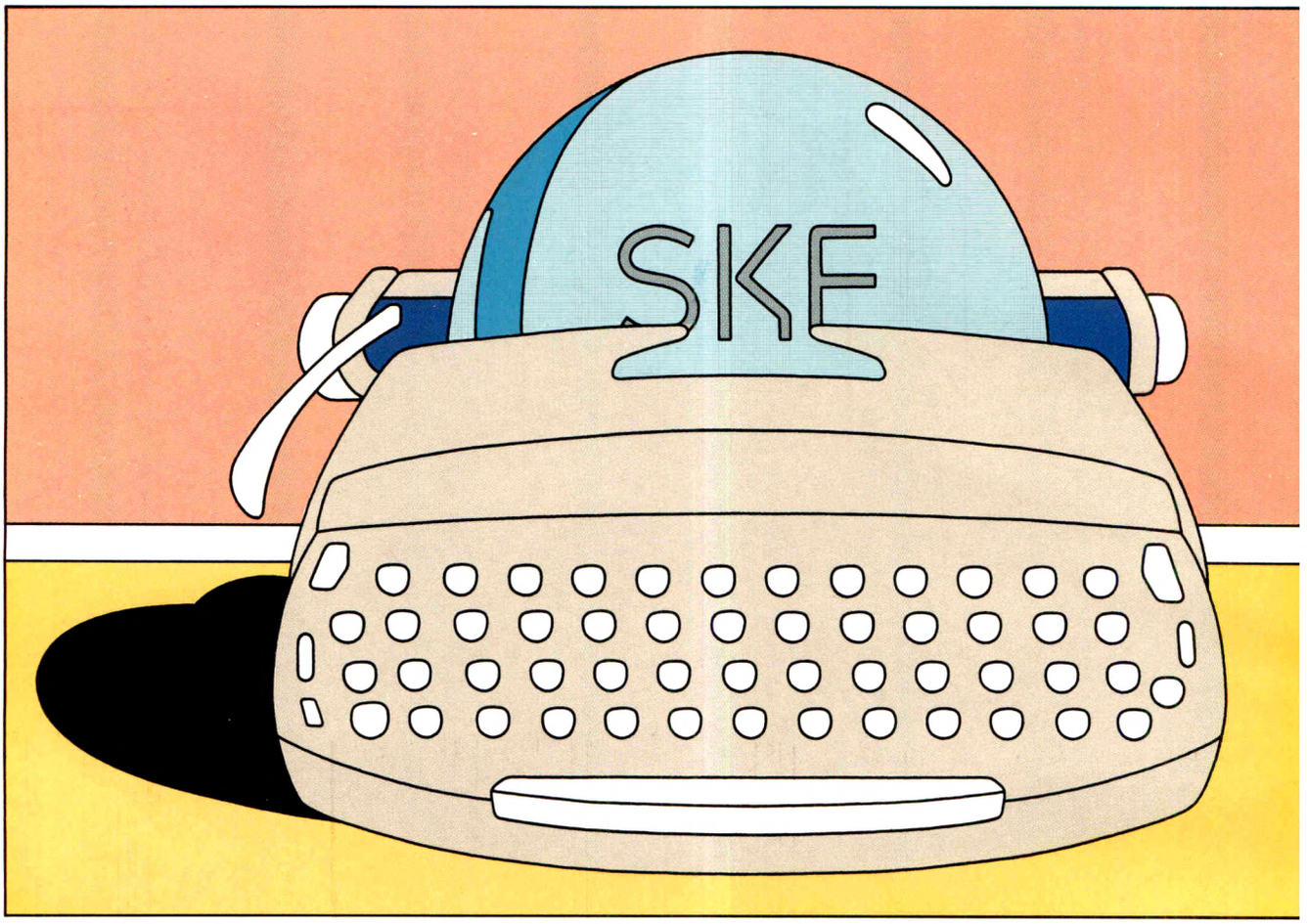
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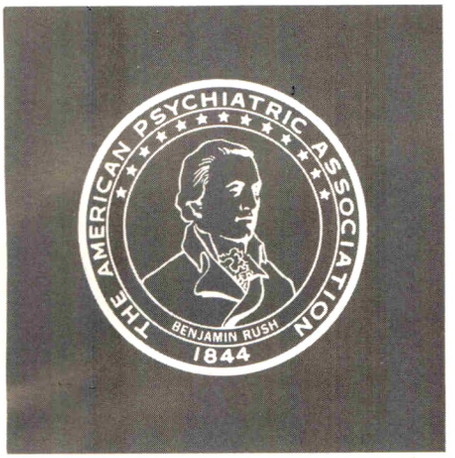
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Subscriptions: U.S. $15.00 per year, Canada and South America $15.75, other foreign $18.00; single issues: $1.75 plus postage.

APA members should direct changes of address and communications about nonreceipt of the *Journal* to the Manpower Division, American Psychiatric Association, 1700 Eighteenth Street, N.W., Washington, D.C. 20009.

Communications from nonmember subscribers and all business communications should be directed to Mr. Robert J. Lowe, Publications Services Division, at the same address.

Advertising representatives: Steven K. Herlitz, Inc., 850 Third Avenue, New York, N.Y. 10022.

Type set by Bru-El Graphic, Inc., 5265 Port Royal Road, Springfield, Va. 22151.

Printed by Dartmouth Printing Co., 69 Lyme Road, Hanover, N.H. 03755.

Second class postage paid at Washington, D.C., and additional mailing offices.

Indexed in *Abstracts for Social Workers, Biological Abstracts, Chemical Abstracts, Cumulative Index to Nursing Literature, Excerpta Medica, Hospital Literature Index, Index Medicus, International Nursing Index, Nutrition Abstracts*, and *Psychological Abstracts*.

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1. Berne E: Principles of Group Treatment. New York, Oxford University Press, 1966, p 26
2. Schildkraut JJ: Tranylcypromine: effects on norepinephrine metabolism in rat brain. Am J Psychiatry 126:925–931, 1970
3. Blackwell B, Marley E, Price J, et al: Hypertensive interactions between monoamine oxidase inhibitors and foodstuffs. Br J Psychiatry 113:349–365, 1967
4. Brosin H: Communication systems of the consultation process, in The Psychiatric Consultation. Edited by Mendel W, Solomon P. New York, Grune & Stratton, 1968, pp 1–12

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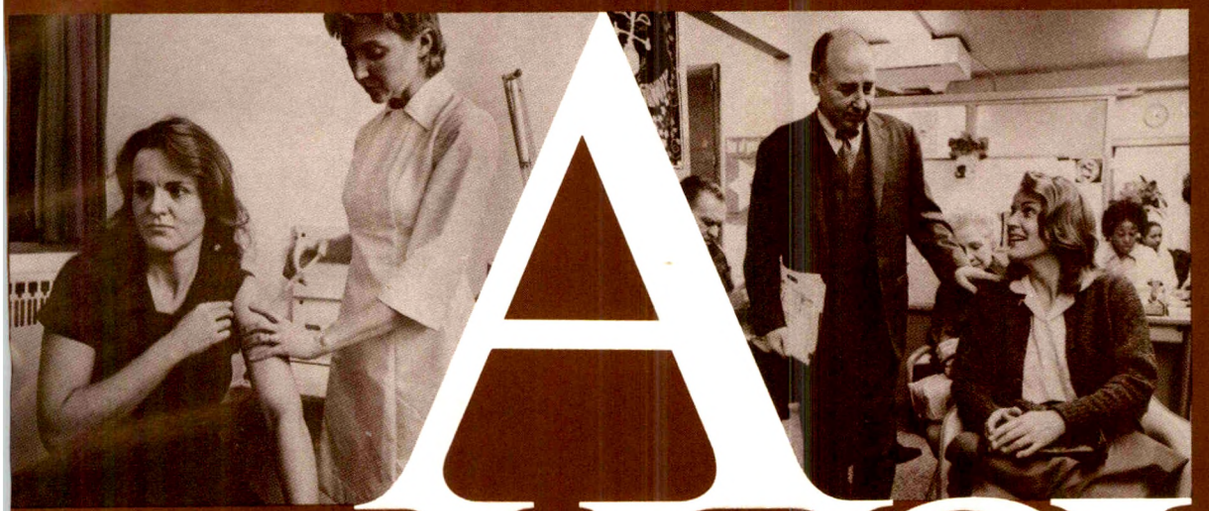
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...that helps keep them out

Controlled Drug Delivery

with new

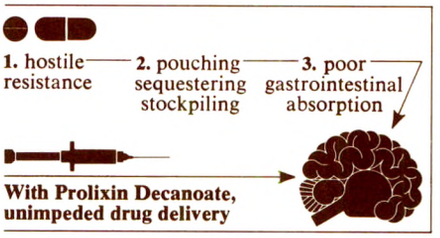
PROLIXIN® DECANOATE
(FLUPHENAZINE DECANOATE INJECTION)

Puts control of the schizophrenic in your hands with injections 1 to 3 weeks apart or longer with an average duration of effect of about 2 weeks

Controlled drug delivery – a revolution in patient management

PROLIXIN® DECANOATE (Fluphenazine Decanoate Injection) HELPS ASSURE EFFECTIVE, UNHINDERED MEDICATION

Controlled drug delivery is *physician*-controlled delivery, an effective prophylactic maneuver against disruption of therapy—one of the most common causes of psychotic relapse. Is the patient taking his medication? You know because you administer it or direct others to. Once administered, therapy cannot be altered by the patient, by his family, or by anyone else.



In most patients, symptomatology is controlled by Prolixin Decanoate for periods of two weeks with a single injection. Sequestered medication and similar problems associated with oral therapy are not encountered. Nor does the patient risk drug loss through severe diarrhea or poor gastrointestinal absorption. Prolixin Decanoate keeps the patient medicated...helps make him more amenable to the entire treatment program and improves his chances for rehabilitation and discharge.

The outpatient is vulnerable to the dictates of his own poor judgment. Deluded by a sense of well-being, he may question the need for medication. Family and friends often give him misleading advice. Oral therapy in such a patient encourages missed doses. Medication with Prolixin Decanoate (Fluphenazine Decanoate Injection) helps assure drug delivery when required and in the dosage prescribed. It helps keep the outpatient out.



FOUR REASONS FOR READMISSION...

For brief summary, see last page of this presentation.

'ROLIXIN® DECANOATE
Fluphenazine Decanoate Injection)
.SSURES ECONOMIC DRUG
)ELIVERY...LESS FREQUENT
)OSING THAN WITH ORAL
'HERAPY

Controlled drug delivery brings cost
f therapy down with less hospitaliza-
on, less nursing time, less frequent
osing. Low annual dosage means less
ost for the hospital, for the patient's
mily, and for the community. It
eans a minimum of drug holidays to
void long-term complications, with
eir confusing schedules for patient
id family.

'ontrolled drug delivery—
revolution in the treatment of the
:hizophrenic patient

ROLIXIN® DECANOATE
Fluphenazine Decanoate Injection)
ELPS ENHANCE LIKELIHOOD
F DISCHARGE

Optimally, the mental hospital
ould be a rehabilitating bridge be-
veen life before and life after custo-
ial care. Prolixin Decanoate often
iortens that bridge because getting the
patient out is frequently a matter of
eeping him medicated. And 1 injec-
on of Prolixin Decanoate means ap-
roximately 2 weeks of symptom
ontrol. The importance of control by
e physician with this injectable can
e seen in the fact that about 1 out of
very 5 inpatients does not take his tab-
ts even when they are administered by nursing staff. With controlled drug delivery, lost or hidden doses are not a problem.

In one study,[1] 24 chronic long-term hospital patients were treated with Prolixin Decanoate in dosages of 12.5 mg. to 75 mg. given every 7 days to 3 weeks. Most of the patients received 25 to 50 mg. per injection. Of these, 13 were discharged after 6 months of treatment, 4 were considered dischargeable, and 7 did not improve. In 12 of the 24 patients who previously had been on different psychotropic drugs for periods of 4 to 96 weeks, improvement with Prolixin Decanoate (Fluphenazine Decanoate Injection) was observed in affect, volition, and higher mental functions. Dischargeability in these patients "may also have been enhanced because the staff, the patient, and the family were assured of an adequate and regular medication intake."[1]

Controlled drug delivery—
a revolution in the care of the outpatient

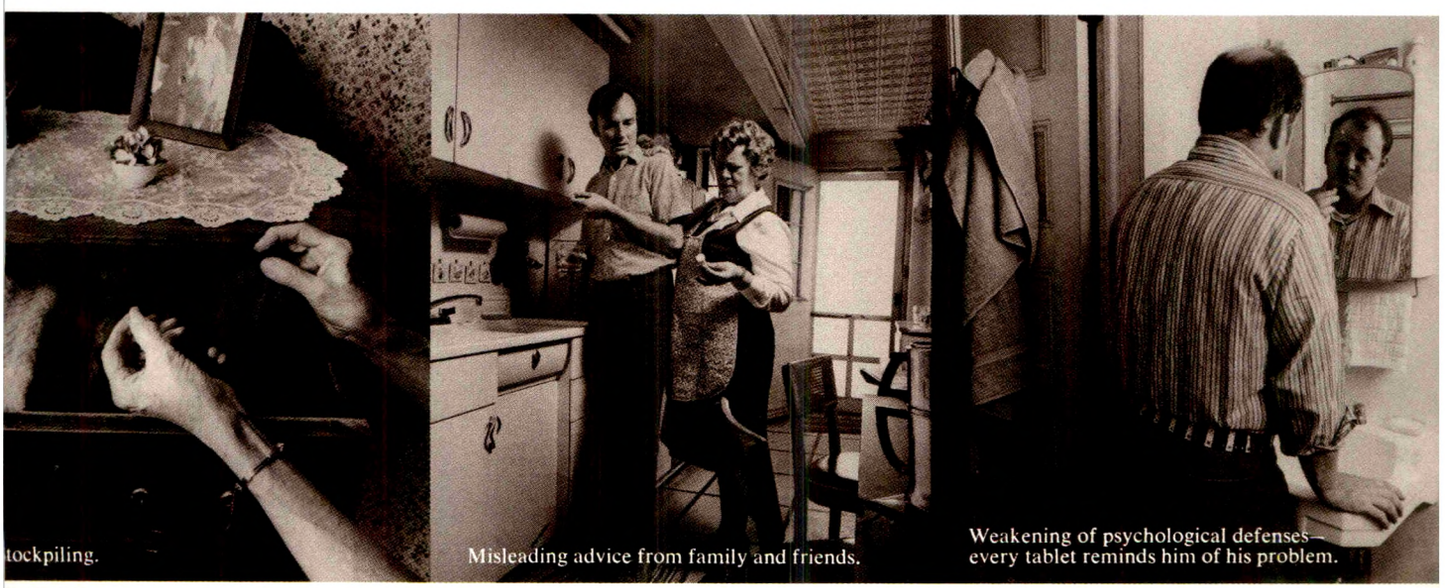
PROLIXIN® DECANOATE
(Fluphenazine Decanoate Injection)
PROMOTES CONTINUITY OF MEDICATION WITH DIMINISHED LIKELIHOOD OF RELAPSE COMPARED WITH ORAL THERAPY

Success in rehabilitative areas like employment and social acceptance depends in large measure on adequate and continuing phenothiazine intake; success in family adjustment no less so. Short-acting medication is not the best path to such success. According to one report,[2] "approximately 50% of all discharged psychotic patients fail to take even the first dose of their outpatient medication." And McClellan and Cowan[3] state that a substantial number of patients taking antipsychotic drugs do so in amounts significantly less than those prescribed. Even once-daily administration does not solve the problem of poor home supervision or the patient's lack of insight into his condition.

Controlled drug delivery with Prolixin Decanoate (Fluphenazine Decanoate Injection) is an efficient route to continuity of medication, and therefore to long-term remission. For one thing there is less strain on the patient's often tenuous adjustment to family living. Since family members are not responsible for supervising the patient's medical needs, they tend to be more accepting, and better feeling is promoted merely because the controlled delivery regimen demonstrates that improvement is possible. Controlled drug delivery also strengthens the patient's psychological defenses. He is not reminded of his psychiatric illness by multiple daily doses.

The same unique advantages of controlled drug delivery with Prolixin Decanoate that promote the discharge-

(Continued on following page)



tockpiling.

Misleading advice from family and friends.

Weakening of psychological defenses—every tablet reminds him of his problem.

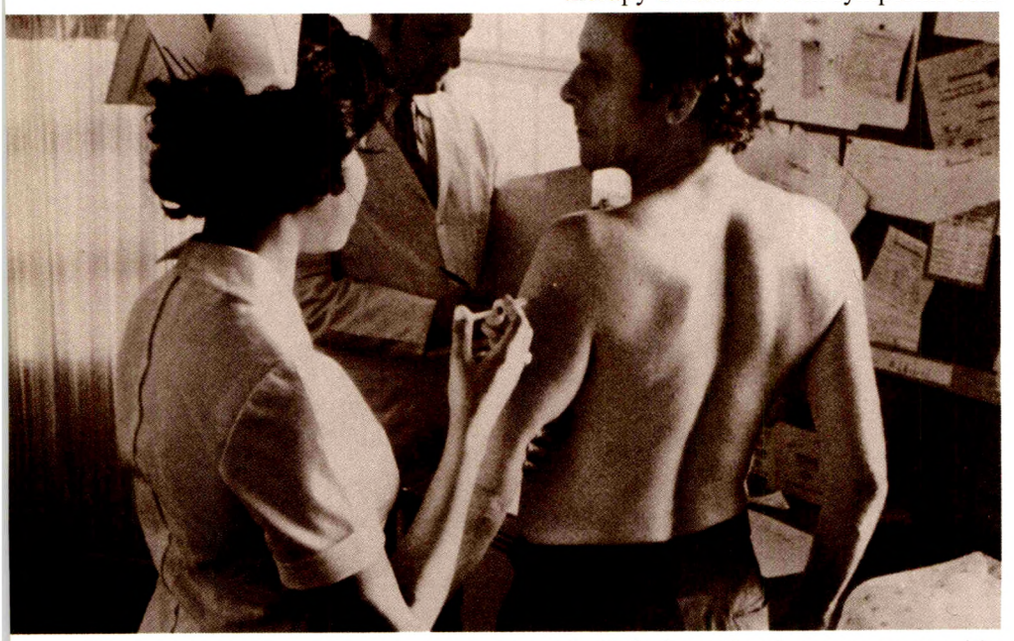
OOD REASONS FOR CONTROLLED DRUG DELIVERY

(Continued from preceding page)
ability of the inpatient and help maintain him in the community are true for the patient who has never been hospitalized. It is just these advantages that will help the physician or psychiatrist keep him in the community without the need for custodial care.

Controlled drug delivery—a revolution in efficiency of administration

PROLIXIN® DECANOATE (Fluphenazine Decanoate Injection) SAVES TIME, REDUCES COST IN THE HOSPITAL, CLINIC, OFFICE

Controlled drug delivery saves time, reduces costs in the hospital. With Prolixin Decanoate there can be no palming, pouching, regurgitating. With Prolixin Decanoate resistance to therapy dwindles. With symptoms con-



trolled, the patient is more manageable, more comfortable, more amenable to the total hospital treatment program. With Prolixin Decanoate only 1 dose visit every 1 to 3 weeks with an average of about 2 weeks is required.



Controlled drug delivery saves time, reduces costs in the clinic and office.

With Prolixin Decanoate less frequen dosing. With Prolixin Decanoate (Fl phenazine Decanoate Injection) mos patients report for their injections onl once in every 2-week period.

18 PATIENTS	18 PATIENTS
	
8 a.m. ¾ hr. 2 p.m. ¾ hr. 6 p.m. ¾ hr.	1 injection every 14 days for most patients
=2¼ hrs. nursing time	4 minutes required for each injection (approx.)
2¼ hrs. × 14 days **=31½ hrs. of nursing time every 14 days**	**=1 hr. 10 minutes nursing time in 14 days**
NURSING TIME SAVED IN 14 DAYS: 30 hours, 20 minutes[4]	

Controlled drug delivery—a revolution in convenience of administration

PROLIXIN® DECANOATE (Fluphenazine Decanoate Injection) MAY BE DELIVERED IN EASY-TO-USE UNIMATIC® SYRINGES

Prolixin Decanoate may be give intramuscularly or subcutaneous Local tissue reactions occur only rare

A dry syringe and needle of at lea 21 gauge should be used. Use of a w needle or syringe may cause the sol tion to become cloudy. Prolixin Dec noate is available in vials of 5 cc. an in Unimatic single-dose preassemble syringes and in Unimatic cartridg needle units with a reusable-plasti holder.

N.B. Extrapyramidal reactions c cur frequently. Most often they are r versible and can usually be controlle by administration of antiparkinsonia drugs. However, in some instanc they are persistent (see Adverse R actions section of Brief Summary Patients should be forewarned an reassured.

Reference: 1. Keskiner, A. et al.: Arch. G Psychiatry 18:477, Apr. 1968. 2. Goldbe H. L., DiMascio, A. and Chaudhary, B.: P chosomatics 11:173, May-June 1970. 3. M Clellan, T. A. and Cowan, G.: BRIE COMMUNICATIONS. Am. J. Psychiat 126:1771, June 1970. 4. Platt, R.: Br. J. S Psychiatry 2:187, 1968.

For Brief Summary, see opposite pag

Controlled Drug Delivery

in schizophrenia with new

PROLIXIN® DECANOATE

(FLUPHENAZINE DECANOATE INJECTION)

BRIEF SUMMARY

Prolixin Decanoate (Fluphenazine Decanoate Injection) provides 25 mg. fluphenazine decanoate per cc. in a sesame oil vehicle with 1.2% (w/v) benzyl alcohol as a preservative.

CONTRAINDICATIONS: In presence of suspected or established subcortical brain damage. In patients who have a blood dyscrasia, liver damage or renal insufficiency, or who are receiving large doses of hypnotics, or who are comatose or severely depressed. In patients who have shown hypersensitivity to fluphenazine; cross-sensitivity to phenothiazine derivatives may occur.

Not intended for use in children under 12.

WARNINGS: Mental and physical abilities required for driving a car or operating heavy machinery may be impaired by use of this drug. Physicians should be alert to the possibility that severe adverse reactions may occur which require immediate medical attention. Potentiation of effects of alcohol may occur. Safety for use during pregnancy has not been established; weigh possible hazards against potential benefits if administered during pregnancy.

PRECAUTIONS: Caution must be exercised if another phenothiazine compound caused cholestatic jaundice, dermatoses or other allergic reactions because of the possibility of cross-sensitivity. When psychotic patients on large doses of a phenothiazine drug are to undergo surgery, hypotensive phenomena should be watched for; less anesthetics or central nervous system depressants may be required. Because of added anti-cholinergic effects, fluphenazine may potentiate the effects of atropine.

Use fluphenazine decanoate cautiously in patients exposed to extreme heat or phosphorus insecticides; in patients with ulcer disease history since aggravation of peptic ulcer has occurred; in patients with history of convulsive disorders since grand mal convulsions have occurred; and in patients with special medical disorders such as mitral insufficiency or other cardiovascular diseases, and pheochromocytoma. Bear in mind that with prolonged therapy there is the possibility of liver damage, pigmentary retinopathy, lenticular and corneal deposits, and development of irreversible dyskinesia.

Fluphenazine decanoate should be administered under the direction of a physician experienced in the clinical use of psychotropic drugs. Periodic checking of hepatic and renal functions and blood picture should be done. Renal function of patients on long-term therapy should be monitored; if BUN becomes abnormal, treatment should be discontinued. "Silent pneumonias" are possible.

ADVERSE REACTIONS: *Central Nervous System*—Extrapyramidal symptoms are most frequently reported. These include pseudoparkinsonism, dystonia, dyskinesia, akathisia, oculogyric crises, opisthotonos, and hyperreflexia; most often these are reversible, but they may be persistent. One can expect a higher incidence of such reactions with fluphenazine decanoate than with less potent piperazine derivatives or straight-chain phenothiazines. The incidence and severity will depend more on individual patient sensitivity, but dosage level and patient age are also determinants. As these reactions may be alarming, the patient should be forewarned and reassured. These reactions can usually be controlled by administration of anti-parkinsonian drugs such as benztropine mesylate or intravenous Caffeine and Sodium Benzoate Injection U.S.P., and by subsequent reduction in dosage. A persistent and sometimes irreversible pseudo-parkinsonian syndrome may develop with chronic administration of phenothiazine compounds. Rhythmic, stereotyped dyskinetic involuntary movements, particularly of the face, mouth, tongue and jaw occur, and may be accompanied by choreiform movements of the limbs. The symptoms persist after drug withdrawal. Anti-parkinsonian agents are seldom of benefit. The risk appears to be greatest in elderly females with organic brain damage receiving large and prolonged doses. Phenothiazine derivatives have been known to cause restlessness, excitement, or bizarre dreams and reactivation or aggravation of psychotic processes may be encountered. If drowsiness or lethargy occur, the dosage may have to be reduced. Dosages, far in excess of the recommended amounts, may induce a catatonic-like state.

Autonomic Nervous System—Hypertension and fluctuations in blood pressure have been reported. Although hypotension is rarely a problem, patients with pheochromocytoma, cerebral vascular or renal insufficiency or severe cardiac reserve deficiency such as mitral insufficiency appear to be particularly prone to this reaction and should be observed carefully. Supportive measures including intravenous vasopressor drugs should be instituted immediately should severe hypotension occur; Levarterenol Bitartrate Injection U.S.P. is the most suitable drug; *epinephrine should not be used* since phenothiazine derivatives have been found to reverse its action. Nausea, loss of appetite, salivation, polyuria, perspiration, dry mouth, headache and constipation may occur. Reducing or temporarily discontinuing the dosage will usually control these effects. Blurred vision, glaucoma, bladder paralysis, fecal impaction, paralytic ileus, tachycardia or nasal congestion have occurred in some patients on phenothiazine derivatives.

Metabolic and Endocrine—Weight change, peripheral edema, abnormal lactation, gynecomastia, menstrual irregularities, false results on pregnancy tests, impotency in men and increased libido in women have occurred in some patients on phenothiazine therapy.

Allergic Reactions—Itching, erythema, urticaria, seborrhea, photosensitivity, eczema and exfoliative dermatitis have been reported with phenothiazines. The possibility of anaphylactoid reactions should be borne in mind.

Hematologic—Blood dyscrasias including leukopenia, agranulocytosis, thrombocytopenic or nonthrombocytopenic purpura, eosinophilia, and pancytopenia have been observed with phenothiazines. If soreness of the mouth, gums or throat or any symptoms of upper respiratory infection occur and confirmatory leukocyte count indicates cellular depression, therapy should be discontinued and other appropriate measures instituted immediately.

Hepatic—Liver damage manifested by cholestatic jaundice, particularly during the first months of therapy, may occur; treatment should be discontinued. A cephalin flocculation increase, sometimes accompanied by alterations in other liver function tests, has been reported in patients who have had no clinical evidence of liver damage.

Others—Sudden deaths have been reported in hospitalized patients on phenothiazines. Previous brain damage or seizures may be predisposing factors. High doses should be avoided in known seizure patients. Shortly before death, several patients showed flare-ups of psychotic behavior patterns. Autopsy findings have usually revealed acute fulminating pneumonia or pneumonitis, aspiration of gastric contents, or intramyocardial lesions. Although not a general feature of fluphenazine, potentiation of central nervous system depressants such as opiates, analgesics, antihistamines, barbiturates, and alcohol may occur.

Hypotension severe enough to cause fatal cardiac arrest, altered electrocardiographic and electroencephalographic tracings, altered cerebrospinal fluid proteins, cerebral edema, asthma, laryngeal edema, and angioneurotic edema; with long-term use, skin pigmentation and lenticular and corneal opacities have occurred with phenothiazines. Local tissue reactions occur only rarely with injections of fluphenazine decanoate.

For full prescribing information, consult package insert.

Supply: 1 cc. Unimatic® single dose preassembled syringes and cartridge-needle units, and 5 cc. vials.



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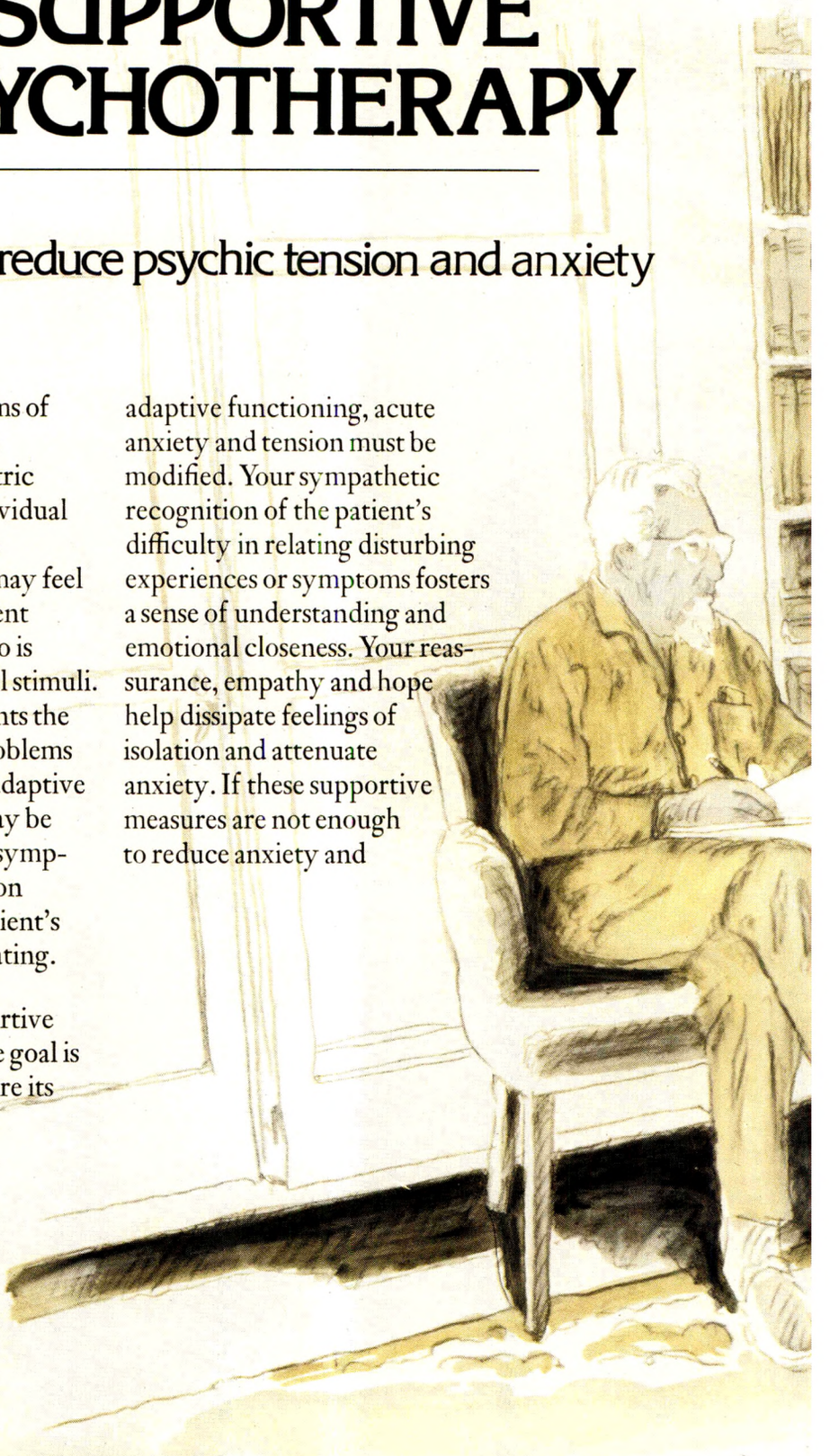
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(diazepam)
IN THE CONTEXT OF SUPPORTIVE PSYCHOTHERAPY

To help reduce psychic tension and anxiety

Symptoms of anxiety and tension often appear when the psychiatric patient's self-esteem, individual integrity and security are threatened. The patient may feel out of control, incompetent and insecure when the ego is unable to manage stressful stimuli. If a state of tension prevents the patient from handling problems with calm and logic, the adaptive functioning of the ego may be further impaired. When symptoms of anxiety and tension become excessive, the patient's distress may be incapacitating.

In supportive psychotherapy where the goal is to brace the ego and restore its adaptive functioning, acute anxiety and tension must be modified. Your sympathetic recognition of the patient's difficulty in relating disturbing experiences or symptoms fosters a sense of understanding and emotional closeness. Your reassurance, empathy and hope help dissipate feelings of isolation and attenuate anxiety. If these supportive measures are not enough to reduce anxiety and



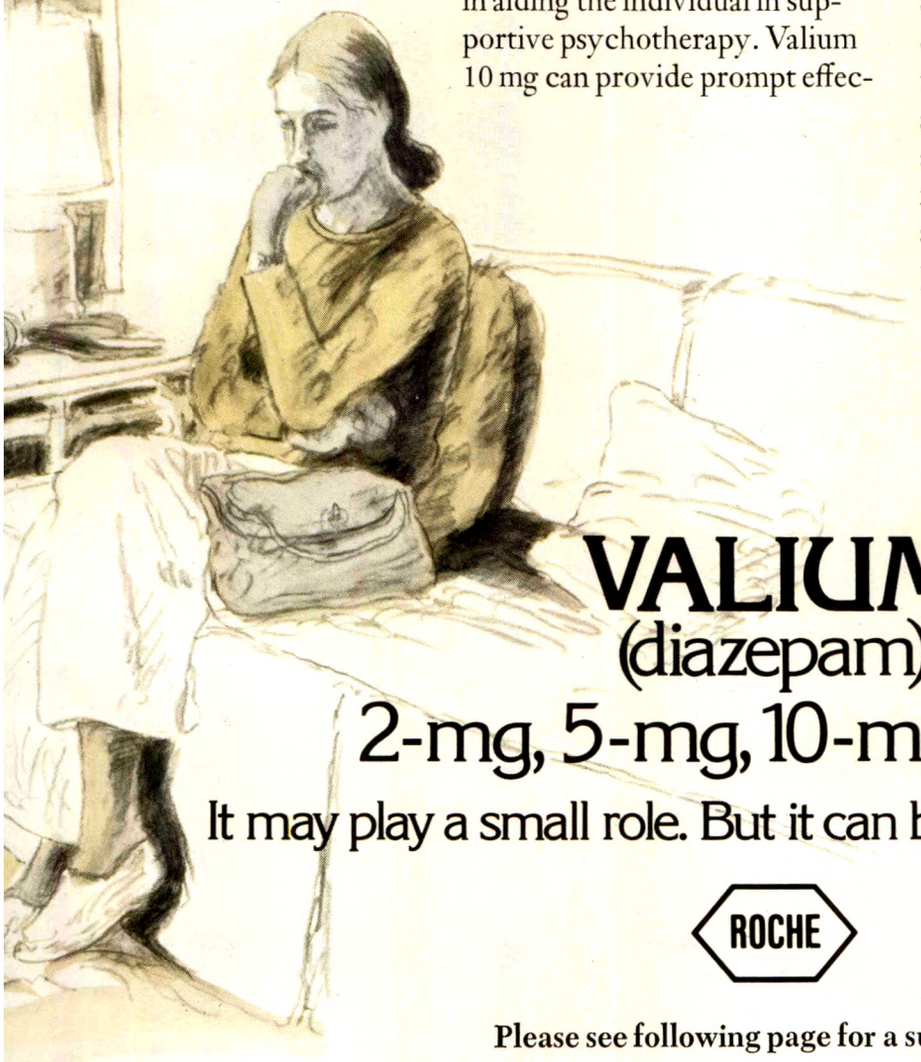
psychic tension to manageable levels, consider Valium (diazepam). Valium, used adjunctively with your supportive measures, can help stabilize your patient by minimizing these excessive symptoms.

Whether you use supportive therapy alone or in conjunction with other forms of therapy, you provide the patient with an auxiliary ego which shares the responsibility of *coping*. Your genuine reassurance and encouragement give the patient confidence and reduce undue stress from external pressures by fortifying ego defenses. If symptoms of excessive anxiety and tension are reduced, the patient can develop a more independent attitude and assume control of the situation. In your treatment of the patient whose symptoms must be modified immediately, the antianxiety and tension-reducing qualities of Valium (diazepam) can be helpful.

The adjunctive role of Valium may be significant in aiding the individual in supportive psychotherapy. Valium 10 mg can provide prompt effective action in minimizing or eliminating excessive psychic tension and anxiety. Once the symptoms are reduced to a manageable level, Valium (diazepam) may be continued as needed with 2 mg or 5 mg t.i.d. or q.i.d. or discontinued entirely.

Valium is generally well tolerated in the usual dosage range. The most frequently reported side effects have been drowsiness, fatigue and ataxia. Your patients should be cautioned against engaging in hazardous occupations or driving during Valium therapy.

When impaired ego function is accompanied by excessive anxiety and psychic tension, the patient needs your supportive help. If the symptoms are incapacitating and must immediately be reduced, consider Valium as an adjunctive psychotherapeutic aid.



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In the context of supportive psychotherapy, helps reduce psychic tension and anxiety.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states, somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d. alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

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Indications: For the treatment of such symptoms as moderate to severe agitation, anxiety and tension, assaultiveness, delusions, hallucinations, hostility, and hyperactivity when they are manifestations of psychosis including schizophrenia, the manic type of manic depressive illness, or psychotic reactions associated with organic brain syndromes or mental retardation. For the control of tics and vocal utterances of Gilles de la Tourette's Syndrome.

Contraindications: HALDOL (haloperidol) is contraindicated in patients who are severely depressed, comatose, have CNS depression due to alcohol or other centrally-acting depressants, have Parkinson's disease or are hypersensitive to this drug.

Warnings: ***Usage in Pregnancy***—Safe use of HALDOL (haloperidol) in pregnancy and lactation has not been established; therefore, its use in pregnancy, in nursing mothers, or in women of childbearing potential requires that the possible benefits of the drug be weighed against the potential hazards. A case of phocomelia in an infant whose mother received haloperidol along with a number of other medications during the first trimester of pregnancy has been reported (a causal relationship was not established in this case). Animals receiving 2 to 20 times the maximum human dose of HALDOL orally and/or parenterally showed increased incidence of resorption, reduced fertility, delayed delivery, dose-related pup mortality (presumably due to lack of maternal care reflecting CNS depression).

Usage in Children—Safety and effectiveness in children have not been established; therefore, this drug is not recommended for use in the pediatric age group.

General—Cases of bronchopneumonia, some fatal, have followed the use of major tranquilizers, including haloperidol. It has been postulated that lethargy and decreased sensation of thirst may lead to dehydration, hemoconcentration and reduced pulmonary ventilation. If these signs and symptoms appear, especially in the elderly, the physician should institute remedial therapy promptly. Although not reported with HALDOL (haloperidol), decreased serum cholesterol and/or cutaneous and ocular changes have been reported in patients receiving chemically-related drugs. HALDOL may impair the mental and/or physical abilities required for the performance of hazardous tasks such as operating machinery or driving a motor vehicle. The ambulatory patient should be warned accordingly. The use of alcohol should be avoided due to possible additive effects and hypotension.

Precautions: HALDOL (haloperidol) should be administered cautiously to patients: (1)—with severe cardiovascular disorders, because of the possibility of transient hypotension and/or precipitation of anginal pain. Should hypotension occur and a vasopressor be required, *epinephrine should not be used* since HALDOL may block its vasopressor activity and paradoxical further lowering of blood pressure may occur. (2)—receiving anticonvulsant medication, because HALDOL may lower the convulsive threshold, although it will *not* increase the effects of anticonvulsant medication. Adequate anticonvulsant therapy should be maintained concomitantly. (3)—with known allergies, or with a history of allergic reactions to drugs. (4)—receiving anticoagulants, since an isolated instance of interference occurred with the effects of one anticoagulant (phenindione).

If concomitant anti-Parkinson medication is required, it may have to be continued after haloperidol is discontinued because of the difference in excretion rates. If both are discontinued simultaneously, extrapyramidal symptoms may occur. Intraocular pressure may increase when anticholinergic drugs, including anti-Parkinson agents, are administered concomitantly with HALDOL. When HALDOL is used to control mania in cyclic disorders there may be a rapid mood swing to depression.

Adverse Reactions: ***CNS Effects:*** *Extrapyramidal Reactions*—Neuromuscular (extrapyramidal) reactions have been reported frequently, often during the first few days of treatment. Generally they involved Parkinson-like symptoms which usually were mild to moderately severe and reversible. Other types of neuromuscular reactions (motor restlessness, dystonia, akathisia, hyperreflexia, opisthotonos, oculogyric crises) have been reported far less frequently, but were often more severe. Severe extrapyramidal reactions have been reported at relatively low doses. Generally extrapyramidal symptoms are dose related since they occur at relatively high doses and disappear or become less severe when the dose is reduced. Administration of anti-Parkinson drugs may be required for control of such reactions. Persistent extrapyramidal reactions have been reported and the drug may have to be discontinued in such cases. *Other CNS Effects*—Insomnia, restlessness, anxiety, euphoria, agitation, drowsiness, depression, lethargy, headache, confusion, vertigo, grand mal seizures, and exacerbation of psychotic symptoms including hallucinations. ***Cardiovascular Effects:*** Tachycardia and hypotension. ***Hematologic Effects:*** Reports have appeared of mild and usually transient leukopenia and leukocytosis, minimal decreases in red blood cell counts, anemia, or a tendency toward lymphomonocytosis. Agranulocytosis has rarely been reported and then only in association with other medication. ***Liver Effects:*** Impaired liver function and/or jaundice have been reported, although a causal relationship has not been established. ***Dermatologic Reactions:*** Maculopapular and acneiform skin reactions and isolated cases of photosensitivity and loss of hair. ***Endocrine Disorders:*** Lactation, breast engorgement, mastalgia, menstrual irregularities, gynecomastia, impotence, increased libido, hyperglycemia and hypoglycemia. ***Gastrointestinal Effects:*** Anorexia, constipation, diarrhea, hypersalivation, dyspepsia, nausea and vomiting. ***Autonomic Reactions:*** Dry mouth, blurred vision, urinary retention and diaphoresis. ***Respiratory Effects:*** Laryngospasm, bronchospasm and increased depth of respiration.

Complete dosage information available in insert which accompanies each package (or on request).

The use of the injectable form is intended for the acutely agitated psychotic patient with moderately severe to very severe symptoms.

IMPORTANT: Full directions for use should be read before HALDOL (haloperidol) is administered or prescribed. 11/72

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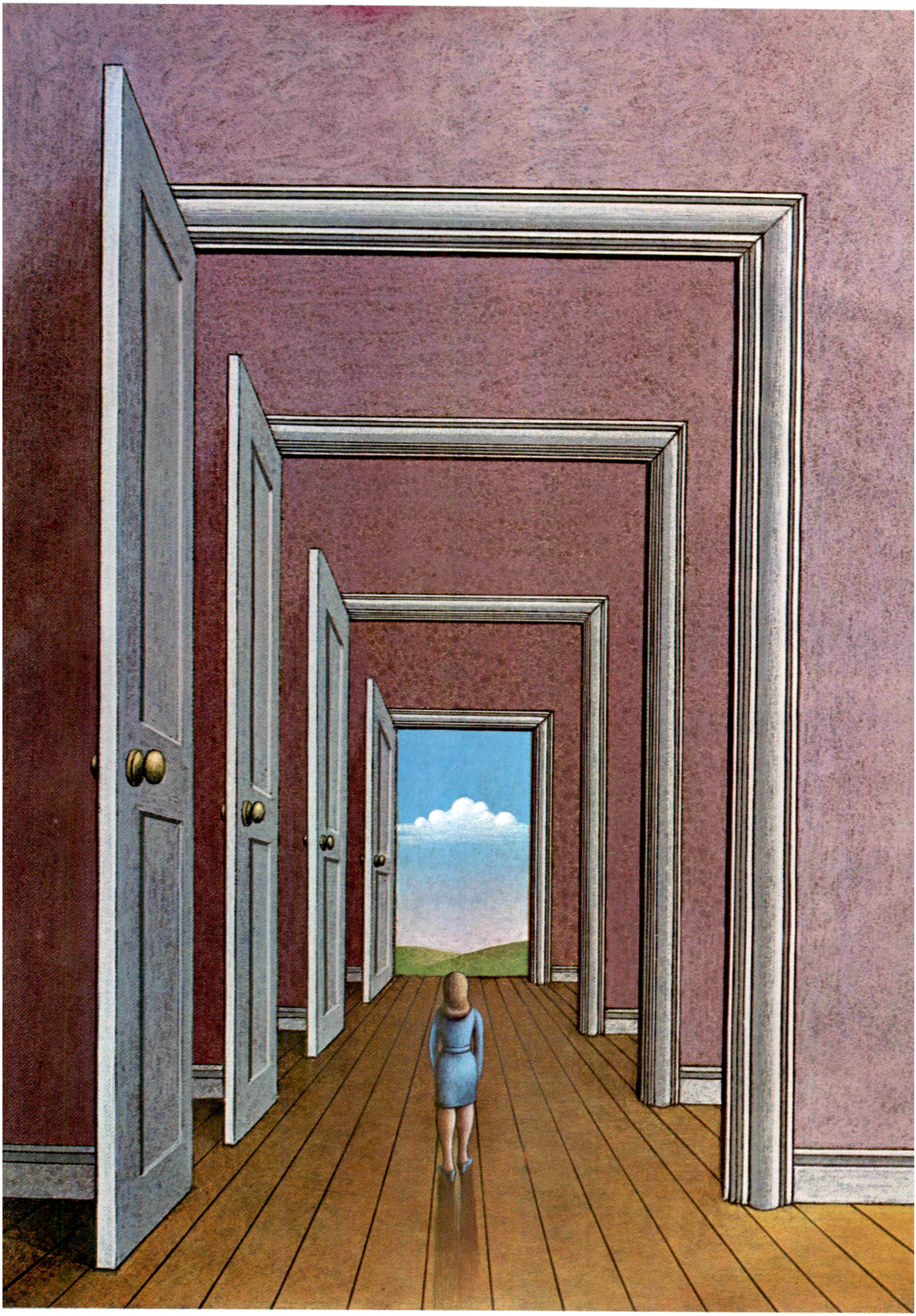
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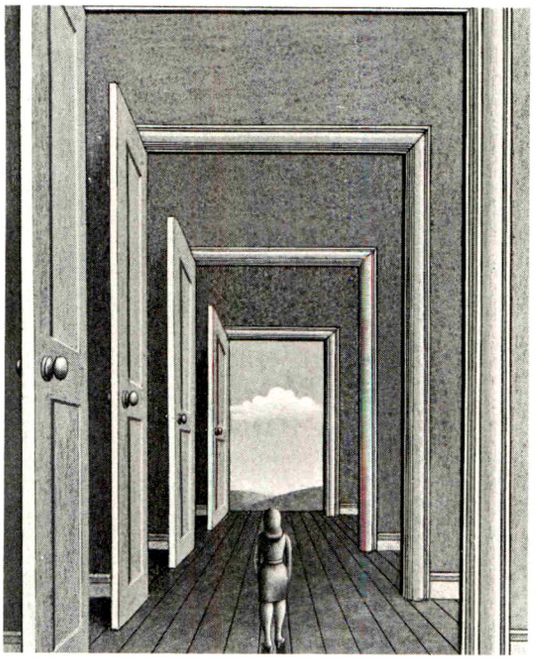
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(See Brief Summary on following page for information on adverse reactions, contraindications, warnings and precautions.)

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Contraindications. Sinequan (doxepin HCl) is contraindicated in individuals who have shown hypersensitivity to the drug.

Sinequan (doxepin HCl) is contraindicated in patients with glaucoma or a tendency to urinary retention.

Warnings. *Usage in Pregnancy:* Sinequan (doxepin HCl) has not been studied in the pregnant patient. It should not be used in pregnant women unless, in the judgment of the physician, it is essential for the welfare of the patient, although animal reproductive studies have not resulted in any teratogenic effects.

Usage in Children: The use of Sinequan (doxepin HCl) in children under 12 years of age is not recommended, because safe conditions for its use have not been established.

MAO Inhibitors: Serious side effects and even death have been reported following the concomitant use of certain drugs with MAO inhibitors. Therefore, MAO inhibitors should be discontinued at least two weeks prior to the cautious initiation of therapy with Sinequan (doxepin HCl). The exact length of time may vary and is dependent upon the particular MAO inhibitor being used, the length of time it has been administered, and the dosage involved.

Precautions. Since drowsiness may occur with the use of this drug, patients should be warned of that possibility and cautioned against driving a car or operating dangerous machinery while taking this drug.

Patients should also be cautioned that their response to alcohol may be potentiated.

Since suicide is an inherent risk in any depressed patient and may remain so until significant improvement has occurred, patients should be closely supervised during the early course of therapy.

Although Sinequan (doxepin HCl) has significant tranquilizing activity, the possibility of activation of psychotic symptoms should be kept in mind.

Other structurally related psychotherapeutic agents (e.g., iminodibenzyls and dibenzocycloheptenes) are capable of blocking the effects of guanethidine and similarly acting compounds in both the animal and man. Sinequan (doxepin HCl), however, does not show this effect in animals. At the usual clinical dosage, 75 to 150 mg. per day, Sinequan (doxepin HCl) can be given concomitantly with guanethidine and related compounds without blocking the antihypertensive effect. At doses of 300 mg. per day or above, Sinequan (doxepin HCl) does exert a significant blocking effect. In addition, Sinequan (doxepin HCl) was similar to the other structurally related psychotherapeutic agents as regards its ability to potentiate norepinephrine response in the animal. However, in the human this effect was not seen. This is in agreement with the low incidence of the side effect of tachycardia seen clinically.

Adverse Reactions. *Anticholinergic Effects:* Dry mouth, blurred vision, and constipation have been reported. They are usually mild, and often subside with continued therapy or reduction of dose.

Central Nervous System Effects: Drowsiness has been observed. This usually occurs early in the course of treatment, and tends to disappear as therapy is continued.

Cardiovascular Effects: Tachycardia and hypotension have been reported infrequently.

Other infrequently reported side effects include extrapyramidal symptoms, gastrointestinal reactions, secretory effects such as increased sweating, weakness, dizziness, fatigue, weight gain, edema, paresthesias, flushing, chills, tinnitus, photophobia, decreased libido, rash, and pruritus.

Dosage. For most patients with illness of mild to moderate severity, a starting dose of 25 mg. t.i.d. is recommended. Dosage may subsequently be increased or decreased at appropriate intervals and according to individual response. The usual optimum dose range is 75 mg./day to 150 mg./day.

In more severely ill patients an initial dose of 50 mg. t.i.d. may be required with subsequent gradual increase to 300 mg./day if necessary. Additional therapeutic effect is rarely to be obtained by exceeding a dose of 300 mg./day.

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Although optimal antidepressant response may not be evident for two to three weeks, antianxiety activity is rapidly apparent.

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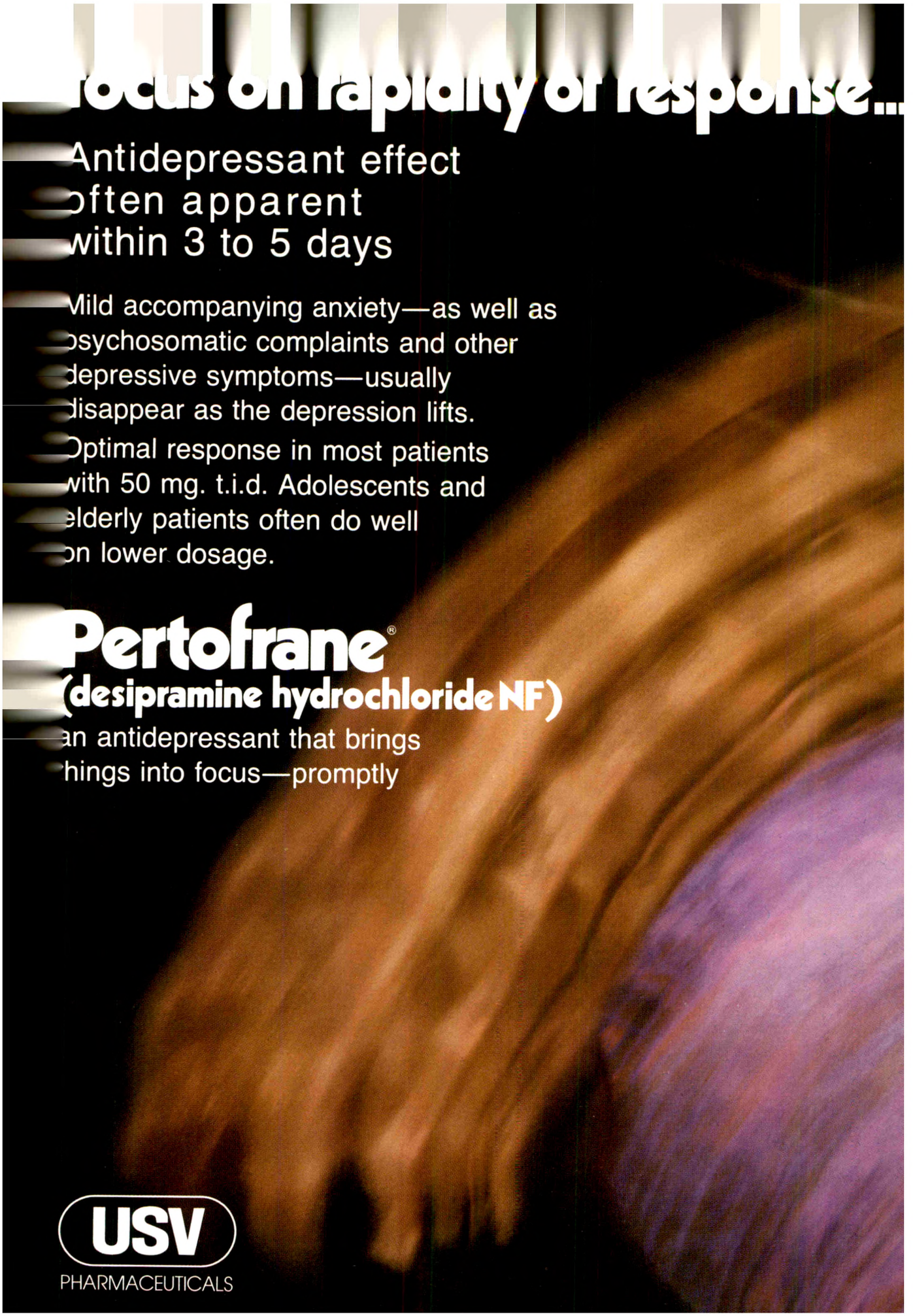
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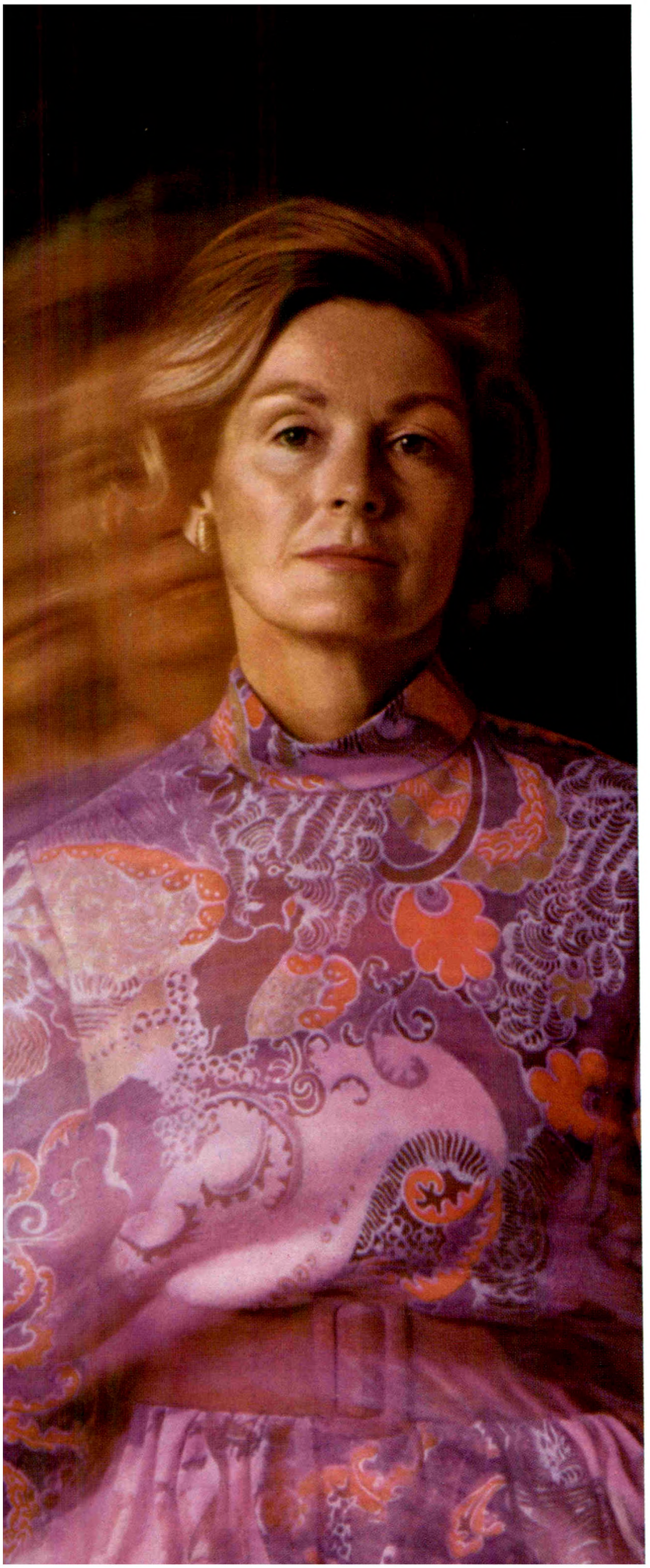
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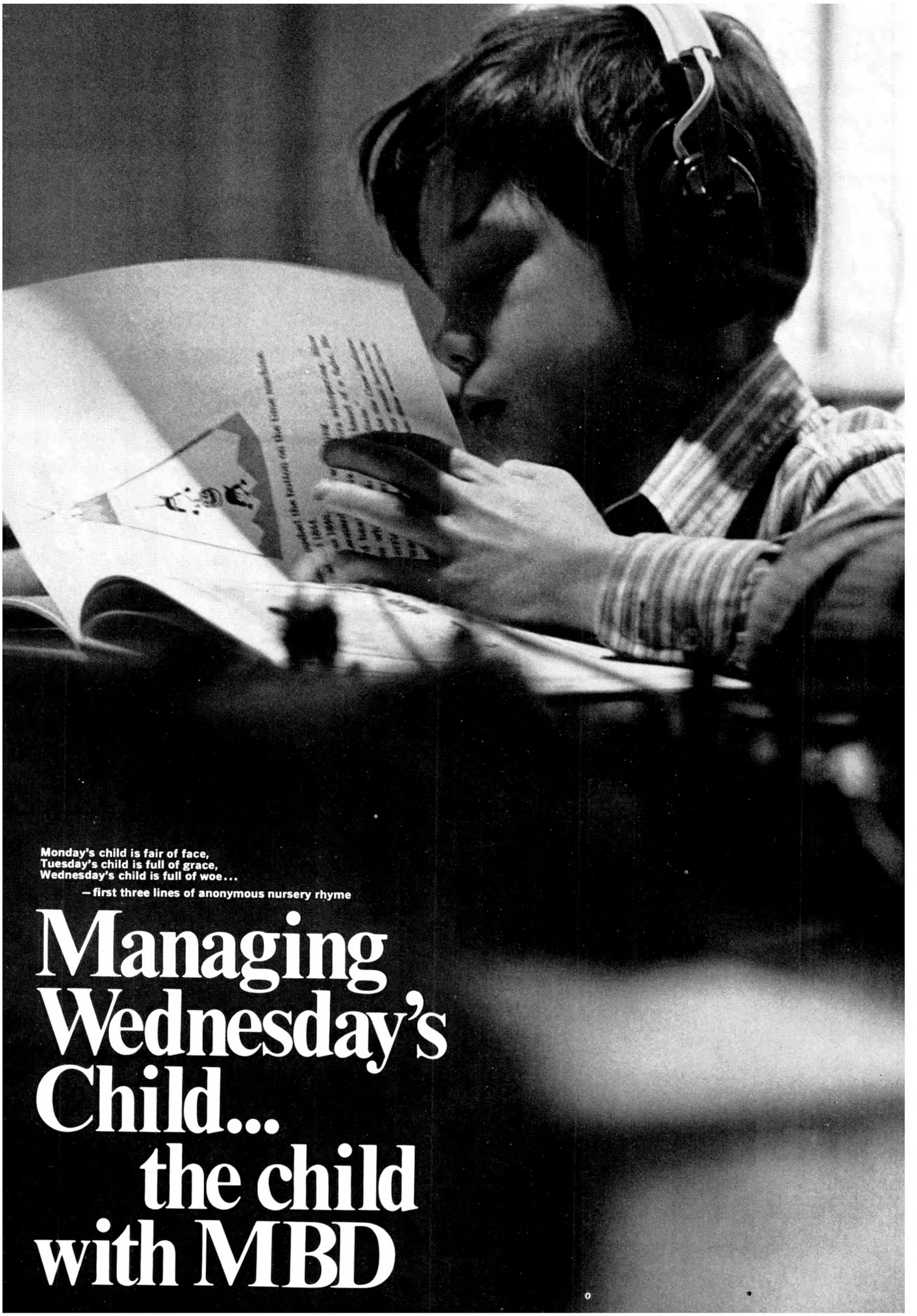

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Antidepressant effect often apparent within 3 to 5 days
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Indication: For relief of mental depression.
Contraindications: Do not use MAO inhibitors concomitantly or within 2 weeks of the use of this drug. Hyperpyretic crises c severe convulsive seizures may occur with such combination potentiation of adverse reactions can be serious or even fatal. When substituting Pertofrane in patients receiving an MAO inhibitor, allow an interval of at least 14 days. Initial dosage in such patients should be low and increases should be gradual and cautiously prescribed. The drug is contraindicated following recent myocardial infarction and in patients with a known hypersensitivity to tricyclic antidepressants. **Warnings** Activation of psychosis may occasionally be observed in schizophrenic patients. Due to atropine-like effects and sympathomimetic potentiation, use only with the greatest care in patients with narrow-angle glaucoma or urethral or ureteral spasm. Do not use in patients with the following conditions unless the need outweighs the risk: severe coronary heart disease with EKG abnormalities, progressive heart failure, angina pectoris, paroxysmal tachycardia and active seizure disorder (may lower seizure threshold). This drug may block the action of the antihypertensive, guanethidine, and related adrenergic neuron-blocking agents. Hypertensive episodes have been observed during surgery. The concurrent use of other central nervous system drugs or alcohol may potentiate adverse effects. Since many such drugs may be used during surgery, desipramine should be discontinued prior to elective procedures. Caution patients on the possibility of impaired ability to operate a motor vehicle or dangerous machinery. Do not use in women who are or may become pregnant, or in children under 12 years of age, unless the clinical situation warrants the potential risk. Because of increased sensitivity to the drug, use lower than normal dosage in adolescent and geriatric patients. **Precautions:** Potentially suicidal patients require careful supervision and protective measures during therapy. Prescriptions should be limited to small quantities. Discontinuation of the drug may be necessary in the presence of increased agitation and anxiety shifting to hypomanic or manic excitement. Atropine-like effects may be more pronounced (e.g. paralytic ileus) in susceptible patients and in those receiving anticholinergic drugs (including antiparkinsonism agents). Prescribe cautiously in hyperthyroid patients and in those receiving thyroid medications; transient cardiac arrhythmias have occurred in rare instances. Periodic blood and liver studies should supplement careful clinical observations in all patients undergoing extended courses of therapy. **Adverse Reactions:** The following have been reported: *Nervous System:* dizziness, drowsiness, insomnia, headache, disturbed visual accommodation, tremor, unsteadiness, tinnitus, paresthesias, changes in EEG pattern, epileptiform seizures, mild extrapyramidal activity, falling and neuromuscular incoordination. A confusional state (with such symptoms as hallucinations and disorientation), particularly in older patients and at higher dosage, may require discontinuation of the drug. *Gastrointestinal Tract:* anorexia, dryness of the mouth, nausea, epigastric distress, constipation and diarrhea. *Skin:* skin rashes (including photosensitization), perspiration and flushing sensations. *Liver:* rare cases of transient jaundice (apparently of an obstructive nature) and liver damage. If jaundice or abnormalities in liver function tests occur, discontinue the drug and investigate. *Blood Elements:* bone-marrow depression, agranulocytosis, thrombocytopenia and purpura. If these occur, discontinue the drug. Transient eosinophilia has been observed. *Cardiovascular System:* orthostatic hypotension and tachycardia. Carefully supervise patients requiring concomitant vasodilating therapy, particularly during initial phases. *Genitourinary System:* urinary frequency or retention and impotence. *Endocrine System:* occasional hormonal effects, including gynecomastia, galactorrhea and breast enlargement, and decreased libido and estrogenic effect. *Sensitivity:* urticaria and rare instances of drug fever and cross-sensitivity with imipramine.
Dosage: All patients except geriatric and adolescent: 50 mg t.i.d. (150 mg. daily). Dosage may be increased up to 200 mg daily. Geriatric and adolescent patients should usually be started with lower dosage (25 to 50 mg. daily) and may not tolerate higher doses. Dosage may be increased up to 100 mg daily. Lower maintenance dosages should be continued for at least 2 months after obtaining a satisfactory response. Mild anxiety and agitation which may accompany depression usually remit as the depression responds. Occasionally, however, a sedative or tranquilizer may be indicated. **How Supplied:** 25 mg. capsules (pink) and 50 mg. capsules (maroon and pink), bottles of 100 and 1000; single-dose blister packs, boxes of 500.

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Monday's child is fair of face,
Tuesday's child is full of grace,
Wednesday's child is full of woe...

—first three lines of anonymous nursery rhyme

Managing Wednesday's Child... the child with MBD

Wednesday's child is full of woe"
It need not be this way for the MBD child.
He can learn and adjust if given a helping hand.

Without help, the MBD child may be a slow reader, can find writing difficult, and arithmetic hard to grasp. He may be excitable, and his actions can be disruptive. The result can seriously hamper his educational and social development.

But, properly diagnosed and treated, MBD – Minimal Brain Dysfunction – can be brought under control so that the afflicted child can develop normally.

And Ritalin can play an important part in the total rehabilitation program of the MBD child, which includes remedial measures at home and at school. It's currently the drug of choice in many MBD situations.[1]



Ritalin is well tolerated. It can help control the excessive motor activity of the MBD child and ameliorate behavioral and learning problems.

Of course, Ritalin is not indicated for childhood personality and behavioral disorders not associated with MBD.

Reference

1. Charlton, M. H.: Paper presented at the Annual Convention of the Medical Society of the State of New York, New York, N.Y., Feb. 7, 1971.

Ritalin® hydrochloride ©
(methylphenidate hydrochloride)

TABLETS

INDICATION

Minimal Brain Dysfunction in Children—as adjunctive therapy to other remedial measures (psychological, educational, social)

Special Diagnostic Considerations

Specific etiology of Minimal Brain Dysfunction (MBD) is unknown, and there is no single diagnostic test. Adequate diagnosis requires the use not only of medical but of special psychological, educational, and social resources.

The characteristic signs most often observed are chronic history of short attention span, distractibility, emotional lability, impulsivity, and moderate to severe hyperactivity; specific learning disabilities; perceptual motor impairment; minor neurological signs and abnormal EEG. The diagnosis of MBD must be based upon a complete history and evaluation of the child and not solely on the presence of one or more of these signs.

Drug treatment is not indicated for all children with MBD. Appropriate educational placement is essential and psychological or social intervention may be necessary. When remedial measures alone are insufficient, the decision to prescribe stimulant medication will depend upon the physician's assessment of the chronicity and severity of the child's symptoms.

CONTRAINDICATIONS

Marked anxiety, tension, and agitation, since Ritalin may aggravate these symptoms. Also contraindicated in patients known to be hypersensitive to the drug and in patients with glaucoma.

WARNINGS

Ritalin is not recommended for children under six years, since safety and efficacy in this age group have not been established.

Since sufficient data on safety and efficacy of long-term use of Ritalin in children with minimal brain dysfunction are not yet available, those requiring long-term therapy should be carefully monitored.

Ritalin should not be used for severe depression of either exogenous or endogenous origin or for the prevention of normal fatigue states.

Ritalin may lower the convulsive threshold in patients with or without prior seizures; with or without prior EEG abnormalities, even in absence of seizures. Safe concomitant use of anticonvulsants and Ritalin has not been established. If seizures occur, Ritalin should be discontinued.

Use cautiously in patients with hypertension.

Drug Interactions

Ritalin may decrease the hypotensive effect of guanethidine. Use cautiously with pressor agents and MAO inhibitors. Ritalin may inhibit the metabolism of coumarin anticoagulants, anticonvulsants (phenobarbital, diphenylhydantoin, primidone), phenylbutazone, and tricyclic antidepressants (imipramine, desipramine). Downward dosage adjustments of these drugs may be required when given concomitantly with Ritalin.

Usage in Pregnancy

Adequate animal reproduction studies to establish safe use of Ritalin during pregnancy have not been conducted. Therefore, until more information is available, Ritalin should not be prescribed for women of childbearing age unless, in the opinion of the physician, the potential benefits outweigh the possible risks.

Drug Dependence

Ritalin should be given cautiously to emotionally unstable patients, such as those with a history of drug dependence or alcoholism, because such patients may increase dosage on their own initiative.

Chronically abusive use can lead to marked tolerance and psychic dependence with varying degrees of abnormal behavior. Frank psychotic episodes can occur, especially with parenteral abuse. Careful supervision is required during drug withdrawal, since severe depression as well as the effects of chronic overactivity can be unmasked. Long-term follow-up may be required because of the patient's basic personality disturbances.

PRECAUTIONS

Patients with an element of agitation may react adversely; discontinue therapy if necessary.

Periodic CBC and platelet counts are advised during prolonged therapy.

ADVERSE REACTIONS

Nervousness and insomnia are the most common adverse reactions but are usually controlled by reducing dosage and omitting the drug in the afternoon or evening. Other reactions include: hypersensitivity (including skin rash, urticaria, fever, arthralgia, exfoliative dermatitis, and erythema multiforme with histopathological findings of necrotizing vasculitis); anorexia; nausea; dizziness; palpitations; headache; dyskinesia; drowsiness; blood pressure and pulse changes, both up and down; tachycardia; angina; cardiac arrhythmias; abdominal pain; weight loss during prolonged therapy. In children, loss of appetite, abdominal pain, weight loss during prolonged therapy, insomnia, and tachycardia may occur more frequently. Toxic psychosis has been reported.

DOSAGE AND ADMINISTRATION

Children with Minimal Brain Dysfunction (6 years and over)

Start with small doses (*eg*, 5 mg before breakfast and lunch) with gradual increments of 5 to 10 mg weekly. Daily dosage above 60 mg is not recommended. If improvement is not observed after appropriate dosage adjustment over a one-month period, the drug should be discontinued.

If paradoxical aggravation of symptoms or other adverse effects occur, reduce dosage, or, if necessary, discontinue the drug.

Ritalin should be periodically discontinued to assess the child's condition. Improvement may be sustained when the drug is either temporarily or permanently discontinued.

Drug treatment should not and need not be indefinite and usually may be discontinued after puberty.

HOW SUPPLIED

Tablets, 20 mg (peach, scored); bottles of 100 and 1000.
Tablets, 10 mg (pale green, scored); bottles of 100, 500, 1000 and Strip Dispensers of 100.
Tablets, 5 mg (pale yellow); bottles of 100, 500, and 1000.

Consult complete product literature before prescribing.

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Ritalin®
(methylphenidate)
only when medication is indicated

CIBA

A27

The challenge: versatility

The stereotype image of "psychiatrist and couch" is an anachronism because today's psychiatrist is called on to diagnose and treat depression in a variety of clinical settings. And when an antidepressant medication is chosen, it must be as flexible and as adaptable as the physician prescribing it.



The psychiatrist's office still represents the setting in which the psychoanalytic process recognizes its fullest potential. Frequently, however, an antidepressant must be employed to foster a working therapeutic relationship. With effective symptomatic relief often provided by ELAVIL® (Amitriptyline HCl, MSD), depressed patients may be able to concentrate on underlying factors instead of somatic manifestations.

The general hospital today usually provides a psychiatric unit where depressed patients are treated. Here, too, the symptomatic relief ELAVIL often provides can be a valuable part of total treatment. As depressive symptoms are relieved, for example, patients may take advantage of the therapeutic activities offered and, even more important, may be discharged sooner and treated on an outpatient basis.



In the outpatient clinic, where follow-up treatment may be necessary for three months or longer, ELAVIL is highly effective in maintaining relief, especially in patients who responded well to higher doses while hospitalized. As a result, these patients may continue to function in their daily activities.



In the mental hospital, severely depressed patients present challenges for psychiatrist and staff alike. Here, the usefulness of ELAVIL is increased by the 50-mg tablet that provides the higher doses often required and by the injectable form for more rapid effect.



The community mental health center, a remarkable innovation in the field of modern psychiatry, offers a unique setting for treating patients with clinically significant depression. Here, too, ELAVIL often proves to be a true asset to the psychiatrist by providing highly effective symptomatic relief that can encourage communication, support the psychotherapeutic relationship, and accelerate the achievement of desired therapeutic goals.

in the treatment of depression

TABLETS: 10 mg, 25 mg, and 50 mg INJECTION: 10 mg per ml

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(AMITRIPTYLINE HCl | MSD)

helps open many doors

For a brief summary of prescribing information, please see following page.

MSD
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addendum

ELAVIL®
(AMITRIPTYLINE HCl | MSD)
dosage forms for differing patient needs

25 mg (yellow)



This tablet may prove useful for most outpatients, who generally do well on 25 mg three times a day. This dosage may be increased to a total of 150 mg a day. Dosage increases are made preferably in the late afternoon or at bedtime. The sedative effect may be apparent before the antidepressant effect is noted. An adequate therapeutic effect may take as long as 30 days to develop.

50 mg (beige)



The 50-mg tablet may be indicated whenever higher dosages are required, as for example when increases are necessary in the late afternoon or bedtime doses. It may also be convenient for many hospitalized patients who may need 100 mg a day initially. In these patients, dosage may be increased gradually to 200 mg a day if necessary. A small number of hospitalized patients may need as much as 300 mg a day.

10 mg (blue)



Because lower doses are generally recommended for adolescents and elderly patients, the 10-mg tablets may be most serviceable. Ten mg three times a day with 20 mg at bedtime may be satisfactory in adolescent and elderly patients who do not tolerate higher dosages.

INJECTION
10 mg per ml



For patients unable or unwilling to take tablets, the injectable form may be suitable initially. The tablets should replace the injection as soon as possible. Initial intramuscular dosage is 20 to 30 mg (2 to 3 ml) four times a day. When Injection ELAVIL is administered intramuscularly, the effects may appear more rapidly than with oral administration.

Usage in Children: In view of the lack of experience in children, this drug is not recommended at the present time for patients under 12 years of age.

Contraindications: Known hypersensitivity. Should not be given concomitantly wit a monoamine oxidase inhibitor or within at least 14 days following the discontir uance of a monoamine oxidase inhibitor since hyperpyretic crises, severe convu sions, and deaths have occurred. When used to replace a monoamine oxidase inhib itor, initiate dosage of amitriptyline HCl cautiously with gradual increase in dosag until optimum response is achieved. Not recommended during the acute recover phase following myocardial infarction or for patients under 12 years of age.

Warnings: May block the antihypertensive action of guanethidine or similarly actin compounds. Should be used with caution in patients with a history of seizures o urinary retention, or with angle-closure glaucoma or increased intraocular pressure Patients with cardiovascular disorders should be watched closely; arrhythmias sinus tachycardia, and prolongation of the conduction time have been reported particularly with high doses; myocardial infarction and stroke have been reporte with drugs of this class. Close supervision is required for hyperthyroid patients o those receiving thyroid medication. May impair mental and/or physical abilitie required for performance of hazardous tasks, such as operating machinery or driv ing a motor vehicle. Safe use during pregnancy and lactation has not been estab lished; in pregnant patients, nursing mothers, or women who may become pregnant weigh possible benefits against possible hazards to mother and child.

Precautions: Schizophrenic patients may develop increased symptoms of psychosis; patients with paranoid symptomatology may have an exaggeration of such symp toms; manic depressive patients may experience a shift to the manic phase. Ir these circumstances, the dose of amitriptyline HCl may be reduced or a majo tranquilizer, such as perphenazine, may be administered concurrently.

When given with anticholinergic agents or sympathomimetic drugs, close supervi sion and careful adjustment of dosages are required. Use cautiously in patients receiving large doses of ethchlorvynol, since transient delirium has been reported on concurrent administration. May enhance the response to alcohol and the effects of barbiturates and other CNS depressants. The possibility of suicide in depressed patients remains during treatment and until significant remission occurs; this type of patient should not have easy access to large quantities of the drug. Concurrent electroshock therapy may increase the hazards associated with such therapy; such treatment should be limited to patients for whom it is essential. When possible, discontinue the drug several days before elective surgery. Both elevation and lowering of blood sugar levels have been reported.

Adverse Reactions: *Note:* Included in this listing are a few adverse reactions not reported with this specific drug. However, pharmacological similarities among the tricyclic antidepressant drugs require that each reaction be considered when amitriptyline is administered. *Cardiovascular:* Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus. *Anticholinergic:* Dry mouth, blurred vision, disturbance of accommodation, constipation, paralytic ileus, urinary retention, dilatation of urinary tract. *Allergic:* Skin rash, urticaria, photosensitization, edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis, leukopenia, eosinophilia, purpura, thrombocytopenia. *Gastrointestinal:* Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, parotid swelling, black tongue. *Endocrine:* Testicular swelling and gynecomastia in the male, breast enlargement and galactorrhea in the female, increased or decreased libido, elevation and lowering of blood sugar levels. *Other:* Dizziness, weakness, fatigue, headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, drowsiness, jaundice, alopecia. *Withdrawal Symptoms:* Abrupt cessation of treatment after prolonged administration may produce nausea, headache, and malaise; these are not indicative of addiction.

Overdosage: The intravenous administration of 1–3 mg of physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning.

How Supplied: Tablets containing 10 mg and 25 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100, 1000, and 5000; tablets containing 50 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100 and 1000; for intramuscular use, in 10-ml vials containing per ml: 10 mg amitriptyline HCl, 44 mg dextrose, 1.5 mg methylparaben and 0.2 mg propylparaben as preservatives, and water for injection q.s. 1 ml.

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., INC., West Point, Pa. 19486

in the treatment of depression

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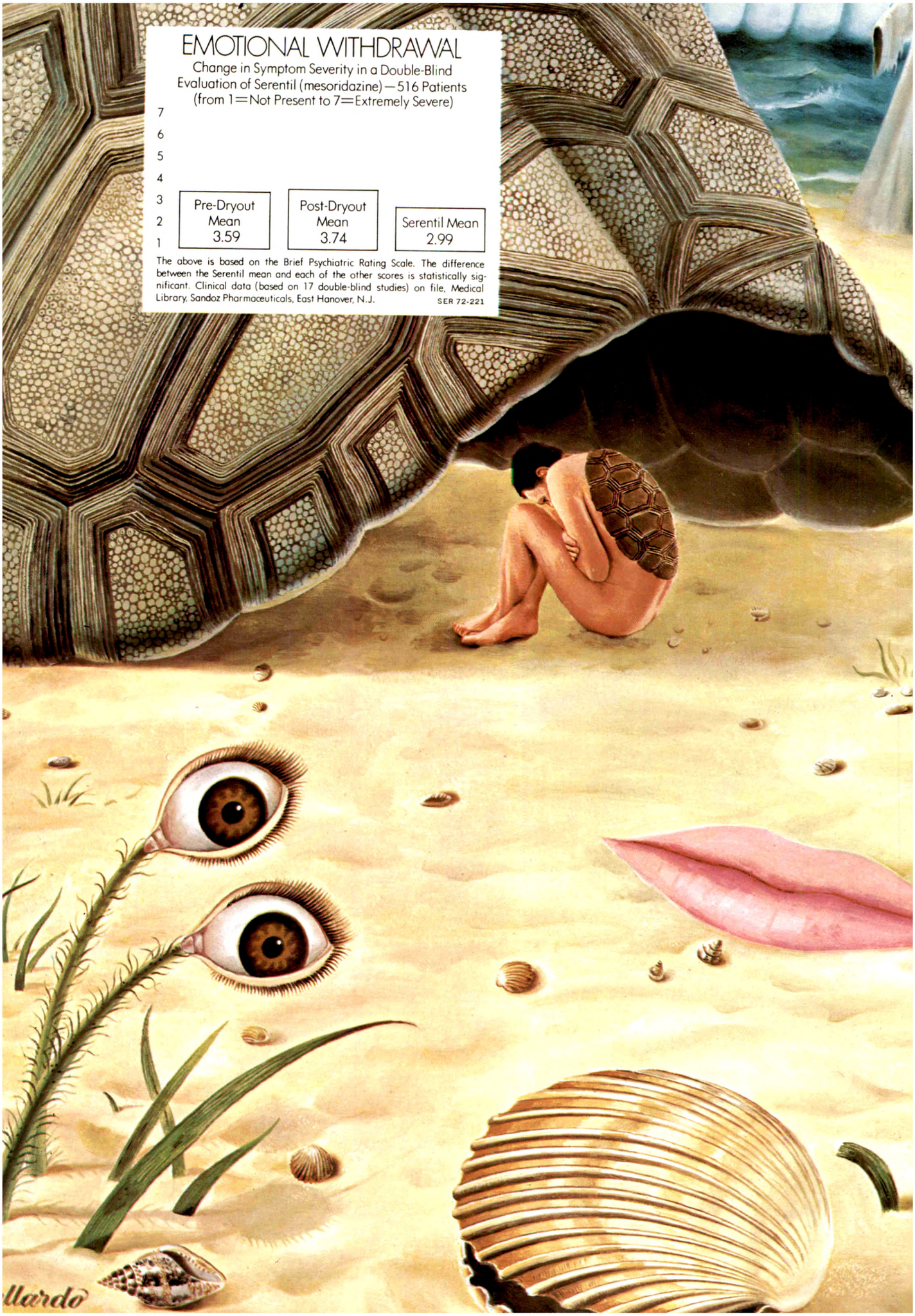
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EMOTIONAL WITHDRAWAL
Change in Symptom Severity in a Double-Blind Evaluation of Serentil (mesoridazine)—516 Patients (from 1=Not Present to 7=Extremely Severe)
7
6
5
4
3
2
1
Pre-Dryout Mean 3.59
Post-Dryout Mean 3.74
Serentil Mean 2.99
The above is based on the Brief Psychiatric Rating Scale. The difference between the Serentil mean and each of the other scores is statistically significant. Clinical data (based on 17 double-blind studies) on file, Medical Library, Sandoz Pharmaceuticals, East Hanover, N.J.
SER 72-221

EMOTIONAL WITHDRAWAL
CONCEPTUAL DISORGANIZATION / ANXIETY
TENSION / HALLUCINATORY BEHAVIOR
SUSPICIOUSNESS / BLUNTED AFFECT

One or more of these symptoms in a schizophrenic is an indication for

Serentil®

(mesoridazine)

Tablets 50 mg. (as the besylate)



Serentil is also available in injectable form

(Ampuls 1 cc.: 25 mg. mesoridazine [as the besylate]. Inactive ingredients—disodium edetate, U.S.P., 0.5 mg.; sodium chloride, U.S.P., 7.2 mg.; carbon dioxide gas [bone dry], q.s.; water for injection, U.S.P., q.s. to 1 cc.) SANDOZ

See next page for brief summary.

EMOTIONAL WITHDRAWAL
CONCEPTUAL DISORGANIZATION / ANXIETY
TENSION / HALLUCINATORY BEHAVIOR
SUSPICIOUSNESS / BLUNTED AFFECT

One or more of these symptoms in a schizophrenic is an indication for



Contraindications: Severe central nervous system depression, comatose states, hypersensitivity.

Warnings: Increase dosage gradually to patients participating in activities requiring complete mental alertness (e.g., driving). The safety of this drug in pregnancy has not been established; hence, it should be given only when the anticipated benefits to be derived from treatment exceed the possible risks to mother and fetus. Use in children under 12 is not recommended. Phenothiazines are capable of potentiating central nervous system depressants as well as atropine and phosphorus insecticides.

Precautions: Ocular changes (seen with other phenothiazines) have not been seen with Serentil (mesoridazine). Because of possible hypotensive reactions, caution in parenteral use is required. Reserve parenteral administration for bedfast patients or for acute ambulatory cases, and keep patient lying down for at least ½ hour after injection. Leukopenia and/or agranulocytosis have been attributed to phenothiazine therapy. Blood dyscrasia (seen with other phenothiazines) has occurred in a single case of transient granulocytopenia.

Adverse Reactions: Serentil (mesoridazine) has demonstrated a remarkably low incidence of adverse reactions when compared with other phenothiazine compounds. *Central Nervous System:* Drowsiness, Parkinson's syndrome, dizziness, weakness, tremor, restlessness, ataxia, dystonia, rigidity, slurring, akathisia, motoric reactions (opisthotonos). *Autonomic Nervous System:* Dry mouth, nausea and vomiting, fainting, stuffy nose, photophobia, constipation and blurred vision. *Endocrine System:* Inhibition of ejaculation and lactation have been noted rarely. *Skin:* Itching, rash, hypertrophic papillae of the tongue and angioneurotic edema. *Cardiovascular System:* Hypotension, tachycardia, EKG changes.

The following reactions have occurred with phenothiazines and should be considered: *Autonomic Reactions*—Miosis, obstipation, anorexia, paralytic ileus. *Cutaneous Reactions*—Erythema, exfoliative dermatitis, contact dermatitis. *Blood Dyscrasias*—Agranulocytosis, leukopenia, eosinophilia, thrombocytopenia, anemia, aplastic anemia, pancytopenia. *Allergic Reactions*—Fever, laryngeal edema, angioneurotic edema, asthma. *Hepatotoxicity*—Jaundice, biliary stasis. *Cardiovascular Effects*—Changes in terminal portion of electrocardiogram, including prolongation of Q-T interval, lowering and inversion of T-wave, and appearance of a wave tentatively identified as a bifid T or a U wave have been observed with phenothiazines, including Serentil (mesoridazine); these appear to be reversible and due to altered repolarization, not myocardial damage. There is no evidence that these changes are precursors of any significant disturbance of cardiac rhythm. Hypotension, rarely resulting in cardiac arrest. *Extrapyramidal Symptoms*—Akathisia, agitation, motor restlessness, dystonic reactions, trismus, torticollis, opisthotonos, oculogyric crises, tremor, muscular rigidity, and akinesia, occasionally persisting for several months or years especially in elderly patients with brain damage. *Endocrine Disturbances*—Menstrual irregularities, altered libido, gynecomastia, weight gain, false positive pregnancy tests. *Urinary Disturbances*—Retention, incontinence. *Others*—Hyperpyrexia, behavioral effects suggestive of a paradoxical reaction, including excitement, bizarre dreams, aggravation of psychoses, and toxic confusional states; following long-term treatment, a peculiar skin-eye syndrome marked by progressive pigmentation of skin or conjunctiva and/or accompanied by discoloration of exposed sclera and cornea; stellate or irregular opacities of anterior lens and cornea.

Dosage and Administration: ORAL: Should be adjusted to needs of the individual. Lowest effective dosage should always be used. When maximum response is achieved, dosage may be reduced gradually to maintenance level. *Schizophrenia:* For most patients, regardless of severity, starting dose of 50 mg. t.i.d. recommended. Usual optimum total daily dose range 100-400 mg. *Behavioral Problems in Mental Deficiency and Chronic Brain Syndrome:* For most patients starting dose of 25 mg. t.i.d. recommended. Usual optimum total daily dose range 75-300 mg. *Alcoholism:* For most patients usual starting dose is 25 mg. b.i.d. Usual optimum total daily dose range 50-200 mg. *Psychoneurotic Manifestations:* For most patients usual starting dose is 10 mg. t.i.d. Usual optimum total daily dose range 30-150 mg. INJECTABLE FORM: For situations in which an intramuscular form of medication is indicated. For most patients a starting dose of 25 mg. is recommended, to be repeated in 30-60 minutes if necessary. Usual optimum total daily dose range 25-200 mg.

Before prescribing, consult package circular.

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SER 72-239

THE AMERICAN JOURNAL OF PSYCHIATRY

Overview: Current Trends in Mental Health Law

BY A. LOUIS MCGARRY, M.D., AND HONORA A. KAPLAN, M.P.A., J.D.

This overview delineates trends in mental health law beginning with early law and proceeding to the present time. The authors discuss such recent mental-health-related judicial decisions and statutory changes as class actions, the right to treatment, admission statuses, classification of mentally ill and mentally retarded patients, involuntary commitment, and patient rights.

IN RECENT YEARS there has been extraordinary activity in the courts and legislatures of America relating to mental health law. A major new legal thesis is that adequate treatment for the institutionalized mentally ill and mentally retarded is a constitutional right. In particular, the class action suit, which we will discuss in greater detail later, has emerged as a mechanism with the potential for unprecedented and accelerated change in mental health systems.

Implicit and, in some cases, explicit in this activity is the requirement that the states reorder their priorities in order to provide adequate resources for the care and treatment of the mentally ill and retarded. It is ironic that such a charge should come at a time of financial austerity in the states, indeed at a time when a number of the states have been forced to cut their mental health budgets. It remains to be seen what the impact of all of this activity will be. The recent landmark case on the right to treatment in Alabama (1) has been appealed to the 5th Federal Circuit Court of Appeals. At stake here, among other important issues, are the degree of authority and the breadth of the remedies a federal court can impose on a state government.

This paper will not exhaustively examine all of the recent legal activity relating to mental health. Rather, we will be describing and analyzing what we regard as the major trends in representative states and courts and the implications of these trends. In doing so we may only succeed in grasping a tiger by the tail, since what will be described is a rapidly evolving, dynamic process subject to significant change tomorrow or, indeed, today.

This paper was written at the invitation of the Editor.

The authors are both with the Laboratory of Community Psychiatry, Harvard Medical School, 58 Fenwood Rd., Boston, Mass. 02115, where Dr. McGarry is Lecturer on Psychiatry and Ms. Kaplan is Associate in Psychiatry (Law). Dr. McGarry is also State Director of Legal Medicine, Massachusetts Department of Mental Health, Boston, Mass.

This work was supported by Public Health Service grant 6813-2 from the Center for Studies of Crime and Delinquency, National Institute of Mental Health.

HISTORICAL BACKGROUND

In earlier times the primary concern of legislation relating to mental illness was the protection and security of society. In colonial America there were laws relating only to the violent and indigent insane. The violent insane were generally treated as common criminals and incarcerated in jails so "that they do not damify others" (2, p. 80). The indigent or dependent insane were dealt with no differently than paupers. Going as far back as 1639, communities enacted repressive settlement laws that penalized paupers and vagabonds, and the dependent insane often roamed the countryside, literally without a home.

During the second half of the 18th century and during the early 19th century, when local communities began to deal with mental illness in a more organized fashion, jails and poorhouses were again used as solutions for the violent and indigent insane. There were, however, no statutes during this period that related to commitment of the mentally ill. Since only the violent or indigent were involved, commitment was easily accomplished. "A few words hastily scribbled on a chance scrap of paper . . . and the deed was done" (3, p. 62).

The early 19th century and the Age of Reason brought significant reform, albeit short-lived, to the treatment of the mentally ill. Due in large part to the ideas of Rush, Pinel, and Tuke, treatment and cure (rather than incarceration and punishment) seemed possible. The philosophy of "moral treatment" advocated the resocialization of the mentally ill individual within an institutional setting where his social and physical environment could be completely and therapeutically structured.

To carry out the precepts of moral treatment a few asylums or special institutions exclusively for the insane

were developed in a number of states.[1] In response to the warm and open therapeutic milieu in these facilities, as well as to selective admission policies, the asylums providing moral treatment achieved impressive success. This "cult of curability," coupled with the effective humanitarian crusades for better care and treatment for the insane led by Dorothea Dix, resulted in the establishment of a network of public facilities for the insane in addition to those under private auspices. However, procedures for commitment remained undefined by statute.

The assumption by the government of broad responsibility for the mentally ill, who were viewed as a distinctly separate group, represented a significant change in public policy. However, public institutions for the mentally disabled could no longer be selective in their admission policies. Within a short period of time public hospitals exceeded their bed capacities, while patient turnover was almost nonexistent. State facilities thus evolved into custodial, rather than therapeutic, entities, differing little from other kinds of custodial institutions, such as jails and poorhouses.

During this period of rapid growth of public asylums, a concern for the rights of the individual who had been committed to such a facility began to develop. This interest resulted more from public anxiety over the wrongful commitment of the sane than from a desire to protect the rights and liberty of the mentally ill. A vigorous campaign for strict commitment laws to prevent wrongful detention was led by Mrs. E.P.W. Packard, who herself had been confined in a mental hospital in Illinois for three years. Consequently, during the 1870s a number of states enacted fairly rigorous commitment laws, some of which included a jury determination of insanity. (Ironically, the jury trial resulted in more commitments of sane individuals than had ever been the case under any other procedure [4].) Legally, this period has been characterized as the "romance with the criminal law" (5). The overly legalistic approach to mental illness and civil commitment "contributed in no small degree to the stigma attached to mental disease" (3, p. 438). Because these statutes utilized the criminal-judicial model, they promoted the public's identification of civilly committed persons with criminals and thus created anxiety and isolation in the management of these patients.

Despite the advances in psychiatric knowledge and treatment that ensued in the 20th century, there was no major impetus for changing commitment laws until the middle of the century. After World War II, there was a growing conviction in the psychiatric community that the criminal law features of commitment statutes, including such concepts as notice and judicial hearings, were detrimental to the treatment of mental illness. During this period of "the romance with psychiatry" (5), model legislation was drafted that dispensed with criminalistic terminology, jury trials, and judicial procedures to decide the issue of commitment (6, pp. 454–475). New statutory provisions permitting commitment for varying periods of time based wholly on psychiatric certifications (rather than on judicial determinations) reflected this approach.

More recently there has been another shift, involving a "significant disenchantment . . . with both restrictive and punitive legal barriers and excessive reliance on psychiatric judgment" (5). There has been a growing attack on what is regarded as paternalism, particularly on the part of institutional administrators and clinicians. In contrast to the law of the past hundred years, which focused primarily on commitment procedures, increasing attention is now being paid to the rights, treatment, and living conditions of the mentally ill and retarded *after* they have been admitted to mental health facilities.

With the widespread growth of the open-door policy in mental health facilities and with the increase in voluntary admissions during the past two decades, we have entered an era in mental health law that might be called a "romance with the community." Increasingly, the relationship between the mental patient and the mental health facility is taking on a contractual character with options on both sides of the contract. Thus at least eight states (6, p. 19) now provide "informal" or unconditional voluntary admission in which either the patient or the facility can terminate treatment at any time. All states but one provide for conditional voluntary admission, in which the patient agrees to give notice of his intention to terminate treatment (6, p. 19). The facility may then initiate judicial proceedings to commit the patient involuntarily if the commitment standards are met. Thus the courts are being used less frequently, the dignity and autonomy of the patient are enhanced, and mental hospitalization is further decriminalized.

JUDICIAL DECISIONS

Law is interpreted, modified, changed, and expanded both through statute and through judicial decision. As a general rule, broad, prospective legal change is effected through legislation; decisional or case law is traditionally more limited and remedial, determining the rights and obligations of particular persons or parties. Only in recent years have the courts been used to any significant degree as a forum for the mentally ill and mentally retarded. While historically there have been decisions relating to wrongful detention in mental hospitals (7, 8), the status, rights, and treatment of the mentally disabled have only recently become a matter of judicial concern.

The last two decades have been characterized by the establishment and expansion of civil (9), criminal (10), and consumer (11) rights through judicial decision. This general model of heretofore powerless and neglected groups in society, utilizing the judicial system as both a forum for the expression of legitimate grievances and as an effective and responsive vehicle for social change, is now being adopted by and for the mentally disabled.

[1] The first private facilities were Friends Hospital, Philadelphia (1817); Bloomingdale Asylum, N.Y. (1817); and McLean Asylum, Mass. (1818). Among the early public institutions were the hospital at Williamsburg, Va. (1773), Eastern Kentucky State Hospital and South Carolina State Hospital (1824), and Worcester State Hospital, Mass. (1833).

Class Actions

Legal efforts on behalf of the mentally ill and retarded have been procedurally facilitated by use of the "class action" mechanism in particular. In essence, class actions are representative law suits brought by a group of individuals who stand in the shoes or represent the interests of an indeterminate number of persons sharing the same legal claim against an alleged common wrongdoer or defendant. In 1966, as part of a general revision of the Federal Rules of Civil Procedure, Rule 23 was rewritten to permit broader application of the class suit. Subsequently, 44 states patterned their state procedural rules on the federal model, creating greater uniformity in and accessibility of class actions at both the state and federal levels. (Mississippi, New Hampshire, Rhode Island, Tennessee, Vermont, and Virginia do not currently have statutory provisions governing class actions.) Generally speaking, these revisions in the procedural requirements for class actions give the courts greater discretion to permit such suits when it is in the interests of justice to do so. Recent examples of permissible classes of plaintiffs include shareholders in a company, consumer groups, and mental patients.

Class suits were originally utilized to provide legal recourse to persons who had relatively small but legitimate claims and who lacked the financial resources to pursue such an action unless they were able to amalgamate claims with similarly injured persons. However, "the modern approach to class actions is encouraging litigation where a remedy is theoretically, but not practically available—as in consumer class actions where each class member has been injured in a small way, but where the aggregate injury is great indeed" (12). The current emphasis is thus placed on the potential impact of the remedy, rather than on the financial ability to bring suit (although this continues to be of concern).

There is no uniform standard or rule of thumb for how many individuals are necessary to bring a class suit. "Of far greater importance is the adequacy of representation by those who would be representative plaintiffs" (12). This requires an "ascertainable class" or a clearly defined group of persons with common interests (13). The facts and law that would permit recovery to one member of the class bringing the suit must permit recovery to all members of the class. This is essential because of the operation of the legal principle of res judicata, which makes the court's decision binding on the entire class, whether it is favorable or not.

The type of issue involved in the case may be determinative of the appropriateness of the class action mechanism: "A civil rights case is much more likely to gather judicial support in borderline cases than is an ordinary suit for fraud" (12). Moreover, underlying the concept of the class action is a notion of equalizing the positions of the parties: "To permit the defendants to contest liability with each claimant in a single, separate suit would, in many cases, give the defendants an advantage which would be almost equivalent to closing the door of justice to all small claimants. This is what we think the class suit practice was [designed] to prevent" (14, p. 90).

In terms of recovery, the class action is more effective in obtaining injunctive relief (i.e., a court order that the defendant either cease or take particular actions) than in awarding compensation or monetary damages. This is determined in large part by the nature of the action; those persons whose interests are represented and in fact litigated in a class suit may, in reality, be unknown and therefore unable to share in their legitimate portion of a monetary award. The difficulty of determining a single sum as damages in cases where the divider is unknown is obvious. In the area of mental health and retardation the legal relief sought by mental patients has most often been injunctive in nature (e.g., that the physical facilities and treatment services of institutions be improved); therefore the class action can be a particularly appropriate and effective vehicle for such purposes.

While a comprehensive compilation of judicial decisions relating to the mentally disabled is beyond the scope of this paper, we will attempt to categorize and evaluate the impact of some of these decisions. It should be pointed out that case law is wholly binding only within the jurisdiction of the court rendering the decision; consequently, a decision of one state need not be followed in another. On the other hand, the common law is based on precedent; the influence and impact of a particular decision, especially in a substantive area where there is little case law, can be impressive.

Right-to-Treatment Decisions

Of major significance is the recent line of cases recognizing the right to treatment of institutionalized mentally ill and mentally retarded persons. Beginning with the landmark decision in *Rouse v. Cameron* (15) in 1966, the District of Columbia Circuit Court of Appeals held that mental patients committed by criminal courts had the right to adequate treatment. The mental condition of such persons had resulted in their being found not guilty by reason of insanity; in the absence of criminal responsibility, punishment and incarceration were precluded. Although criminal commitment to a high-security mental hospital for therapeutic care and treatment would be both appropriate and constitutional, such confinement *without adequate treatment* was held tantamount to incarceration, thus transforming the hospital into a penitentiary. The *Rouse* decision stated that "the purpose of involuntary hospitalization is treatment, not punishment"; adequate treatment was in effect held to be the sine qua non of such criminal commitments. Two years later, again in the context of criminal commitments to mental hospitals, Massachusetts extended the right to treatment to persons found incompetent to stand trial (16).

In 1971, in response to a class action, an Alabama Federal District Court further extended the right to adequate treatment to *all* mentally ill and mentally retarded persons who were in institutions involuntarily, whether their commitments were under civil or criminal procedures (1). Moreover, the court based its decision on a constitutional guarantee of the right to treatment: "To deprive any citi-

zen of his or her liberty upon the altruistic theory that the confinement is for humane therapeutic reasons and fail to provide adequate treatment violates the very fundamentals of due process" (1, p. 785).

Dissatisfied with the state plan for improvement of facilities required by the court in its first order (1, p. 785) and utilizing contributions and suggestions of a panel of national mental health experts, the court issued an order in April 1972 (17) that detailed the criteria for adequate treatment in three areas: 1) a humane psychological and physical environment, 2) a qualified staff with a sufficient number of members to administer adequate treatment, and 3) individualized treatment plans. However, the focus in the 1972 *Wyatt v. Stickney* order is exclusively on the allocation and expenditure of state funds for mental health institutions. Given limited resources for mental health services, the widespread application of the explicit and comprehensive *Wyatt* standards and requirements could be antithetical to the general movement toward community alternatives to institutional care. In October 1972, Judge Johnson, who wrote the *Wyatt* opinion, further applied its holding to require adequate medical treatment, including psychiatric services for prison inmates (18). In sharp contrast to these holdings a federal district court in the same Circuit (Georgia) held that determinations regarding the quality of mental health services and the adequacy of treatment rest with the "elected representatives of the people" and not with the courts (19).

These cases involved patients involuntarily committed under civil or criminal law. The increasing utilization of voluntary admissions to mental hospitals substantially mitigates the "incarceration" component of involuntary hospitalization. However, while the issue of adequacy of treatment for voluntarily admitted patients has not yet been addressed by the courts, there is no medical, legal, or ethical justification for compromising the quality of care and treatment at a mental health facility because of the legal status of the recipient. Minimum standards for adequate treatment should be no different, and certainly no lower, for voluntary patients than for involuntary patients. The constitutional guarantee of equal protection under the laws, particularly when one is dealing with state facilities, should mandate such a result.

Mental Retardation Law Suits

While *Wyatt v. Stickney* encompassed the rights of both the mentally ill and mentally retarded, there have been a number of recent cases that have specifically focused on the legal interests of the mentally retarded. Class actions on behalf of mentally retarded residents in state facilities have been brought in New York (20, 21), in Massachusetts (22), in Illinois (23, 24), and unsuccessfully (pending appeal) in Georgia (19). As in the *Wyatt* model, the plaintiffs seek the establishment and implementation of standards for adequate treatment and the improvement of the physical plant and treatment services. In the area of patient labor, class suits are under way in Tennessee (25) and in Florida (26) alleging the unconstitutional servitude of mentally retarded residents required to perform services in state facilities.

In an important decision in Pennsylvania in 1971, a federal court ordered that all mentally retarded children there be accorded access to a free public education program appropriate to their learning capacities (27). The potential impact of this decision on the custodial mental retardation facility could be enormous. In the District of Columbia plaintiffs in a class action had been suspended from school because of mental, behavioral, physical, or emotional handicaps or deficiencies. The court initially ordered the reenrollment of the named plaintiffs and the identification and readmission of other members of the class. In March 1972, judgment was made in favor of the plaintiffs, although the detailed order has not yet been handed down (28). In California a suit is currently being brought on the grounds of denial of education to a mentally retarded child in response to the state's attempt to terminate her placement in a state facility because of her "noneducability" (29). To date, the court has enjoined the state from interfering with the child's education until a final judicial determination is made.

Inaccurate and arbitrary classification and placement of mentally retarded children and the denial of their right to education is the basis for pending law suits in California (30), Louisiana (31), and New York (32). Other pending right-to-education suits are being brought in Michigan (33) and in North Carolina (34); others deal with autistic children (California) (35), special education in general (Delaware) (36), and emotionally disturbed children (Massachusetts) (37).

In addition to the broad categories of the right-to-treatment and mental retardation cases discussed here there have been several decisions delineating other rights of the mentally disabled. In *Commonwealth v. Wiseman* (38) the Massachusetts Supreme Judicial Court established the right to privacy of institutionalized mental patients and prohibited their commercial exploitation. This was particularly significant since there had been no legal recognition of the right to privacy for anyone in Massachusetts until this decision (39, 40). In New York a federal court held that an involuntarily committed mental patient whom the court had not found incompetent was constitutionally guaranteed the right to refuse certain kinds of treatment because of religious beliefs (41). Still another court held that it would not permit the sterilization of a mental retardate who had given birth to two illegitimate children because the patient was unable to give consent (42).

While there are decisions and statutes in other jurisdictions that conflict with and contradict these cases, the examples cited here do represent some of the current judicial thinking in the area of mental health and retardation. Moreover, it is suggested that these decisions will have an impact beyond their jurisdictions. While the *Rouse* decision was narrowly grounded in a statutory right to treatment, subsequent decisions have not been legislatively derived.[2] Partially in response to the right-

[2] *Wyatt v. Stickney* (1) was based on constitutional grounds.

to-treatment decisions, legislative proposals have begun to reflect this legal concept (43) [Fla Stats ss 394.459 (1), (2), (3)].

The initial *Wyatt v. Stickney* order (1) required the State of Alabama to devise and submit a plan to the court for upgrading state institutions for the mentally disabled. This mechanism of administrative response and solution under judicial supervision has been emulated elsewhere (22, 44). In New York State the public furor resulting from the Willowbrook exposé and lawsuit (20) apparently resulted in the restoration of $5 million to the state budget. While such measures cannot be exclusively attributed to recent decisions protecting the legal rights of the mentally disabled, the impact of these landmark cases has most likely been significant.

As noted before, case law is essentially a response to past injustices and wrongs; appropriate redress is traditionally made to particular persons in particular situations. Thus judicial solutions, while occasionally broadly and innovatively applicable, are ordinarily limited in scope and tied to the past.

STATUTORY CHANGE[3]

Comprehensive and prospective legal change in protecting the rights of and providing services to the mentally disabled can be found primarily in legislative measures. In the past few years a number of states have enacted new legislation or have recodified and amended their existing statutes relating to mental health and mental retardation. An examination of some of these new laws has suggested several trends, or at least common problem areas for which legislative solutions have been undertaken. There is clearly no single or uniform method of dealing with these areas; what these new statutes have in common is a comprehensive attempt to correct the deficiencies of the past. "It is one of the happy incidents of the federal system that a single . . . State may, if its citizens choose, serve as a laboratory . . ." (45, p. 311). Here we see a number of legislative "experiments" going on simultaneously, with the potential of providing us with a number of innovative ways to improve the mental health system.

While the new mental health laws discussed in this paper deal with many of the same problem areas, they vary greatly in their length and degree of detail. Massachusetts, following the suggestion that "less law rather than more law may be the answer for the future" (46), recently enacted a relatively short mental health statute. This statute, in many instances, assigns regulatory authority to administrators to establish detailed standards, criteria, and requirements. For example, the definition of mental illness for the purposes of admission and involuntary commitment to mental health facilities is left to articulation in administrative regulations [Mass Gen Laws, ch 123 s 2; Mass Dept of Mental Health Regulation 1]. After promulgation, such administrative regulations have the force of law (47, p. 309). In addition, they are a more flexible mechanism and more easily amended than statutory law.

On the other hand, states such as New York and California have relatively lengthy and specific statutes, in addition to which regulations are also promulgated. While public hearings are required for the adoption of rules and regulations, it is probably fair to assume that legislation is subject to greater accessibility and public scrutiny and to more rigorous accountability than are regulations.

No value judgment should be made regarding the length and specificity of a statute. There are advantages and disadvantages to each approach. What is of primary importance is careful drafting, consistency, and comprehensiveness.

Areas of Change

The trends and changes in the new mental health statutes are generally in response to two broad problem areas: 1) the debilitative and dysfunctional effects of long-term custodial institutionalization, and 2) the neglect and, indeed, the abrogation of the rights and personal dignity of individuals committed to hospitals for indeterminate periods of time. The thrust of new mental health legislation has thus been toward shorter hospital stays, community alternatives to institutionalization, legal protection of the patient's rights, and substantial guarantees of the quality of treatment while under the care of the facility. We shall consider these changes in greater detail later in the paper.

New Statutory Trends Related to Institutionalization

Variety of admission statuses. Less than 25 years ago "the World Health Organization reported that only 13,848 of 138,253 admissions to state mental hospitals in the United States, slightly more than 10%, were voluntary" (6, p. 17). Stated conversely, almost 90 percent of these patients had been involuntarily committed to mental institutions. In contrast to this almost monolithic system of hospitalization, more recent statutes provide a number of alternative routes to hospitalization and a variety of admission statuses. In addition to involuntary admissions there are the informal voluntary admissions based on the general hospital model [e.g., Pa Stats Title 50 s 4402; Ill Stats ch 91½ s 4-1; NY Mental Hyg Law s 31.15]. Another (and more common) voluntary admission status is a limited or conditional one in which release requires written notice and a lapse of generally three to ten days [e.g., Pa Stats Title 50 s 4403; Fla Stats s 394.465; Ga Code s 88-503; NY Mental Hyg Law s 31.13]. There are also pretreatment statuses such as emergency [e.g., Fla Stats s 394.463 (1); Ga Code s 88-504; Ill Stats ch 91½ s 7-1; Minn Stats s 253A.04], diagnostic [Pa Stats Title 50 s 4406], and evaluative [Fla Stats s 394.463 (2); Ga Code s 88-505.2; Calif Welf & Instits Code ss 5200, et seq] admissions that are usually of short duration and often precede admission for planned care and treatment.

[3] Mental health legislation in the following states was reviewed and regarded as representative for purposes of the statutory section of this paper: California, Florida, Georgia, Illinois, Massachusetts, Minnesota, Missouri, New York, and Pennsylvania.

Several legislative provisions explicitly state a presumption or a preference for voluntary admissions. "It shall be the duty of all state and local officers . . . to encourage any person suitable therefor and in need of care and treatment for mental illness to apply for admission as a voluntary or informal patient" [NY Mental Hyg Law ss 31.21(a), 31.23; see also Fla Stats s 394.465; Ga Code s 88-503]. In Massachusetts the right to conditional voluntary status and notice of that right on admission are absolute [Mass Gen Laws ch 123 s 12(c)].

The diversity in admission statuses, as well as the documented increase in the numbers of voluntary admissions to mental hospitals (6, pp. 17, 48), indicates substantial legislative effort to put an end to hospital stays of unlimited duration in which the patient could not initiate his discharge or his release. It also represents an increasing sophistication and an accommodation of the hospitalization episode to the particular needs of the particular patient. Finally, it represents enhanced emphasis on the rights of mentally disabled persons to freedom of movement and to self-determination.

Classification of mentally ill and mentally retarded persons. One of the disparate elements of the new mental health statutes is their inconsistent manner of classifying or categorizing mentally ill and mentally retarded persons. Nowhere is the terminology uniform from one state to another. This is partly the product of the differential variety of admission statuses available under the new laws. There are other distinctions as well. For example, eligibility for consenting admission to facilities often depends on age, ranging from 14 years in Georgia [Ga Code s 88-503] and Florida [Fla Stats s 394.465] to 18 years in most states [e.g., Pa Stats Title 50 s 4402, et seq; Ill Stats ch 91½ s 5-2; Minn Stats s 253A.03]. This disparity reflects the ambiguity in classifying adolescents as either children or adults.

In the past the law has generally not differentiated among disabilities; mental illness, epilepsy, mental retardation, and senility have often been jumbled together into a single statutory provision. Of special significance in recent legislative reform has been the degree of awareness and sophistication in particularizing these disabilities. For example, mental retardation has been clearly differentiated from mental illness: "A mentally retarded person may be considered mentally ill provided that no mentally retarded person shall be considered mentally ill solely by virtue of his mental retardation" [Mass Gen Law ch 123 s 1]. Moreover, the new laws specifically require the development of services that are adapted and appropriate to the needs of the mentally retarded (rather than acquiescing to watered-down mental health programs). Finally, there is awareness of variations within mental retardation: levels or degrees of retardation have now been recognized in statute and regulation [Mass Gen Laws ch 123 s 2; Mass Dept of Mental Health Regulation MR 116].

Few of the recent mental health statutes have reformed procedures relating to the category of the psychiatric offender, i.e., the mentally ill person who is within the criminal law system. Generally, provisions relating to this area will be found in the criminal statutes. With few exceptions [e.g., Pa Stats Title 50 ss 4407, et seq; Mass Gen Laws ch 123 ss 13–19] procedures governing the mentally ill criminal offender have tended to be neglected even in those states which have undergone substantial revision of their mental health statutes. There is a risk here that when civil statutes governing the mentally ill become procedurally complex or when standards for civil commitment become more restrictive, recourse to simpler criminal procedures may increase. Thus in California, with its new, restrictive civil procedures, an increase in the use of criminal procedures has been reported (49). It is a relatively simple matter to allege "disorderly conduct" or "disturbing the peace" against a mentally ill person and bring about commitment in a mental hospital based on the question of his competency to stand trial.

However, attention is being focused on this area in case law (50, 51). Indeed, a recent decision by the United States Supreme Court stated: "Considering the number of persons affected, it is perhaps remarkable that the substantive constitutional limitations on this power [to commit mentally ill persons] have not been more frequently litigated" (51, p. 737). It is likely that statutory reform will eventuate in the area of the mentally ill offender.

Limitations on involuntary commitment. Closely linked to the greater variety of admission statuses and to the increasing use of voluntary admission have been significant limitations on the wholesale use of involuntary commitment. Indeed, a primary purpose of the new California mental health law is "to end the inappropriate, indefinite and involuntary commitment of mentally disordered persons . . ." [Calif Welf & Instits Code s 5001(a)]. The statutory standard for involuntary commitment has become somewhat more stringent in a number of states, contributing to a decreasing number of involuntary commitments. In 1959, only five states restricted involuntary hospitalization to those who were "dangerous." Ten years later nine states utilized dangerousness as the sole criterion for involuntary commitment, while 18 others permitted the need for care and treatment (or the welfare or best interests of the patient or society) to serve as alternative bases to dangerousness for involuntary hospitalization (6, p. 36). In 1971, Massachusetts adopted the concept of "likelihood of serious harm" (i.e., dangerousness) as its standard for commitment [Mass Gen Laws ch 123 ss 7, 8, 12]. It should be noted that in 1971, Massachusetts specifically rejected the concept of "social harm" (other than physical harm) as a basis for commitment; prior to this time, Massachusetts had been alone in its use of this standard (6, p. 36). New York, in a statute that became effective January 1, 1973, utilizes the standard of "likelihood of serious harm" for some commitments [NY Mental Hyg Law s 31.37], while Missouri in a 1969 law introduced "dangerousness" as one of its standards for commitment [Mo Stats s 202.800].

New statutory restrictions on involuntary commitment have had an effect on the institutionalization of the mentally retarded. In Massachusetts, for example, there can be no involuntary commitment of mentally retarded per-

sons who are not also mentally ill [Mass Gen Laws ch 123 ss 1, 7(a)]. In some of the newer statutes providing for the involuntary commitment of the mentally retarded, the standard for commitment is distinct from that for commitment of the mentally ill; in New York it is limited to a person ". . . in need of inpatient care and treatment as a resident in a school, [where] such care and treatment is essential to his welfare, and [where] his judgment is so impaired that he is unable to understand the need for such care and treatment" [NY Mental Hyg Law s 33.01].

Procedurally, involuntary commitment may be accomplished through the courts or through the medical certification of mental disability by a psychiatrist. In some of the new statutes a variety of commitment mechanisms have evolved, each appropriate to the particular involuntary status involved. For example, medical certification is often utilized for brief periods of involuntary hospitalization, such as emergency care [e.g., Pa Stats Title 50 s 4405 (ten days); Mo Stats s 202.795 (five days); Minn Stats s 253.04 (three days)]. (One court has held that involuntary commitment by medical certification for an indeterminate period of time is unconstitutional [52].) Judicial commitment usually relates to longer commitments and is accompanied by the full panoply of legal protections such as notice, hearing, representation by counsel, and so forth [Mass Gen Laws ch 123 s 5; Minn Stats s 253A.07; Ill Stats ch 91½ ss 8, 9; Ga Code s 88-507, et seq; Fla Stats s 394.67]. Falling somewhere between these procedures is a quasi-judicial or administrative commitment carried out by hearing officers [Fla Stats s 394.457 (6); Ga Code s 88-506]. It should be noted that administrative commitment is subject to judicial review [Fla Stats s 394.547 (6) (e)] (6, p. 57).

These statutory measures serve to restrict the availability and unnecessary utilization of involuntary commitment for long periods of time. In so doing they force closer scrutiny of the clinical status and particular needs of the mentally disabled individual and militate against the neglect of institutionalized patients.

Orientation of facilities toward the community. A number of the new mental health laws reflect the general shift in mental hospital treatment toward "open-door" policies and the effort to abolish locked and neglected back wards. New statutory provisions set forth explicit internal procedures for patient management and for administration of the institutions. For example, some provisions were designed to result in shorter patient stays, as we discussed previously. Others mandate periodic clinical review [Ill Stats ch 91½ s 10-2; Minn Stats s 253A.17-(7); NY Mental Hyg Law s 15.03; Mass Gen Laws ch 123 s 4]. This involves a close, individualized evaluation of a patient's progress, with a view toward discharge and continued treatment in the community rather than in the institution. The Massachusetts statute specifically requires the consideration of alternatives to hospitalization in its periodic review provision [Mass Gen Laws ch 123 s 4], while the Illinois law sets forth a similar requirement in its commitment hearings [Ill Stats ch 91½ s 9-6]. It is likely that these provisions will contribute to an increasing patient turnover and a decreasing hospital census. This should make possible a reallocation of resources, perhaps directed toward community alternatives.

As a result of the impetus of the federal Community Mental Health Centers Act of 1963 (53, 54), more than 300 community mental health centers have been established throughout the country. Some recent statutes have recognized the halfway house and community residence as viable and homelike alternatives to the traditional hospital as well [Minn Stats s 245.691; Calif Welf & Instits Code ss 5115, 5705.5; NY Mental Hyg Law s 11.29; Mass Gen Laws ch 19 s 29; Mass Dept of Mental Health Regulation 5.2; Mo Stats s 202.645; Fla Stats s 393.015; Minn Stats s 252.021]. Advocates of the community residence model argue that rigorous state regulation and licensure of these programs risk their conversion into "mini-institutions." On the other hand, legislative recognition and approbation of their intermediary function further encourage a change in the role of the state hospital and state school. Rather than providing custodial care for chronic patients, the large mental institutions may well be transformed into crisis-oriented facilities for more acutely ill patients.

The orientation of mental health programs toward the community, as well as the increasing use of voluntary hospitalization, represents acceptance into and by society of its mentally ill citizens and narrows the differences in legal and social status between the mentally healthy and the mentally ill.

Trends Related to Patients' Rights

Explicit statutory recognition in recent legislation of the civil and personal rights of the mentally ill and mentally retarded not only constitutes significant and needed reform, but also indicates the kinds of discrimination and illegal restrictions that had been placed on the mentally disabled in the past. Enumerated in recent legislation are such rights as that to communicate with persons outside the facility (via correspondence, telephone, and visits) [e.g., Pa Stats Title 50 s 4423; Mo Stats s 202.847; Fla Stats s 394.459 (4); Ga Code s 88-502.5; Ill Stats ch 91½ s 12-2; Minn Stats ss 253A.05, 253A.17; Calif Welf & Instits Code s 5325; NY Mental Hyg Law 15.05; Mass Gen Laws ch 123 s 23]; to keep clothing and personal effects [e.g., Fla Stats s 394.459 (5); Ga Code s 88-502.6; Calif Welf & Instits Code s 5325; NY Mental Hyg Law s 15.07]; to religious freedom [e.g., Pa Stats Title 50 s 4423; Minn Stats s 253A.17]; to vote [Fla Stats s 394.459 (6); Mo Stats s 202.847; Ga Code s 88-502.7; Ill Stats ch 91½ s 9-11; NY Mental Hyg Law s 15.01; Mass Gen Laws ch 123 s 25]; to be employed if possible [e.g., Pa Stats Title 50 s 4423; Ga Code s 88-502.8; NY Mental Hyg Law s 15.09]; to manage or dispose of property [Mo Stats s 202.847; Ill Stats ch 91½ s 9-11; Minn Stats s 253A.18]; to execute instruments such as wills [Mo Stats s 202.847; Minn Stats s 253A.18; Mass Gen Laws ch 123 s 25]; to enter contractual relationships [Mo Stats s 202.847; Ill Stats ch 91½ s 9-11; Minn Stats s 253A.18; Mass Gen Laws ch 123 s 25]; to make pur-

chases [Mo Stats s 202.847; Minn Stats s 253A.18]; to education [Fla Stats s 394.459 (7); Ga Code s 88-502.9; NY Mental Hyg Law s 15.11]; to habeas corpus [e.g., Pa Stats Title 50 s 4426; Ill Stats ch 91½ s 10-6; Calif Welf & Instits Code s 7250]; to independent psychiatric examination [Pa Stats Title 50 s 4423; Fla Stats s 394.459 (3) (b)]; to civil service status [Ill Stats ch 91½ s 9-11; NY Mental Hyg Law s 15.01]; to retain licenses, privileges, or permits established by law such as a driver's or professional license [Minn Stats s 253A.18; Ill Stats ch 91½ s 9-11; NY Mental Hyg Law s 15.01]; to sue and be sued [Minn Stats s 253A.18]; to marry [Minn Op AG 1008 Sept 22, 1968; Mass Dept of Mental Health Regulation MH 16]; and not to be subject to unnecessary mechanical restraints [Mo Stats s 202.843; Ga Code s 88-502.4; Minn Stats s 253.17].

Mental illness does not necessarily impute incompetency in exercising one or more of these rights, and incompetency requires specific judicial determination. A number of statutes clearly differentiate between mental illness and mental incompetency [e.g., Mo Stats s 202.847; Mass Gen Laws ch 123 s 25; Fla Stats s 394.459 (1)] and make reference to this distinction in their catalog of patients' rights [e.g., Ill Stats ch 91½ s 9-11; NY Mental Hyg Law s 29.03].

The right to legal representation. The constitutional guarantee of the right to counsel or legal representation, which originated in the area of criminal law (55), has been incorporated into a number of new mental health statutes to protect the rights of patients in commitment hearings, including the appointment of counsel for indigent persons [e.g., Fla Stats ss 394.467 (2) (d), 394.467 (3), 394.473; Ga Stats ss 88-502.12, 88.503.3, 88.506.6; Ill Stats ch 91½ s 9-4]. The participation of an attorney representing the interests of the patient precludes the reality or the appearance of railroading commitment and establishes a true "adversary" setting, ensuring close adherence to statutory commitment standards.

Mechanisms for review, apprisal, and explanation of patients' rights are being introduced in several states. New York, for example, has established the Mental Health Information System, a court-affiliated service to review the admission and retention of all patients and to inform and advise patients of their rights [NY Mental Hyg Law s 29.09]. A California court has instituted the use of a nonprofit legal services group to apprise involuntarily certified patients of their legal rights (56). In Minnesota, review boards examine the admission and detention of patients [Minn Stats s 253A.16], while Massachusetts requires the designation of a "civil rights officer" in each mental health facility to assist the patient in exercising his rights [Mass Dept of Mental Health Regulation MH 16]. In addition, apart from traditional guardianship and conservatorship provisions, new and more flexible forms of patient representation or patient advocacy have been statutorily established [Calif Welf & Instits Code s 5350; Fla Stats s 394.459; Ga Code s 88-502.19; Ill Stats ch 91½ ss 9-6, 9-7].

Legal representation of patients' rights and interests indicates a fundamental change in attitudes toward the mentally disabled: no longer is the mental patient passively subject to the legal, economic, and personal consequences of his illness, but may, with legal assistance if necessary, affirmatively and actively continue to control his own life.

Privacy and confidentiality. Protecting the privacy of mental patients, as well as the confidentiality of their communications and medical records, has become a significant legal concern. The "right of privacy" implies the right of the individual to keep some information about himself or access to his personality (as by a photograph or personality test) completely secret from others. "Confidentiality," on the other hand, presupposes disclosure of certain information to another person; however, the communication of such information is limited to specifically authorized parties. "Privileged testimonial communication" is an evidentiary concept, permitting the patient or client to prevent his physician, psychologist, etc., from disclosing confidential communications in court or in other legal proceedings.

All but three states (Rhode Island, Texas, and Wisconsin) recognize the right of privacy in some form (57, footnote 3), while approximately two-thirds of the states have enacted physician-patient testimonial privilege statutes (58). Interestingly enough, physician-patient testimonial privilege statutes in Connecticut [Gen Stats of Conn Title 52-146 (d), (e), (f)] (59, footnote 8) and in Massachusetts [Mass Gen Laws ch 322 s 203] protect only communications between psychotherapists and patients—one of the few areas where the legal interests of the mentally disabled have been given priority. In addition, most of the new mental health statutes specifically protect the confidentiality of patient records [Pa Stats Title 50 s 4602; Fla Stats s 394.459 (8); Ga Code s 88-502.10; Ill Stats ch 91½ s 12-3; Minn Stats s 246.13; Mass Gen Laws ch 123 s 36; Calif Welf & Instits Code s 5328 (cf. s 5328.2); NY Mental Hyg Law s 15.13]. The Massachusetts statute goes on to protect patients "from commercial exploitation of any kind. No patient shall be photographed, interviewed or exposed to public view without either his express written consent or that of his legal guardian" [Mass Gen Laws ch 19 s 29(f)].

Informed consent. Another issue relating to patient rights is the ability or capacity of the mentally disabled individual to give informed consent to his "voluntary" admission, to particular kinds of treatment or therapy, to surgical procedures, or to scientific research (including interviews, behavioral observation and testing, administration of drugs, and so forth). The case law regarding a mental patient's capacity to consent is ambiguous, and decisions support almost any position.[4] There are a few statutory provisions requiring patient consent to surgery and to specific modalities of treatment such as electroconvulsive therapy [Minn Stats s 253A.17; Calif Welf & Instits Code ss 5325, 5325.5; NY Mental Hyg Law s 15.03; Mass Gen Laws ch 123 s 23].

With regard to capacity to give informed consent to

[4] Compare *Wilson v. Lehman* (60) and *Lester v. Aetna Casualty & Surety Co.* (61).

voluntary admission, some states have avoided the issue and created admission statuses such as "nonobjecting" [Ga Code s 88-506; NY Mental Hyg Law s 33.25] or "voluntary commitment" [Pa Stats Title 50 s 4403]. Finally, there is almost no statutory or case law relating to consent to scientific research (62). Federal (63) and state (64) guidelines requiring patient consent to participation in research are essentially hortatory but may indicate the direction of future statutory or regulatory amendment.

Statutory right to treatment. Corresponding to the growing body of case law relating to the right to treatment, recent legislation has begun to articulate substantive guarantees of adequate and humane treatment:

> Each patient in a facility shall receive treatment suited to his needs which shall be administered skillfully, safely, and humanely with full respect for his dignity and personal integrity. Each patient shall receive such medical, vocational, social, educational, and rehabilitative services as his condition requires to bring about an early return to his community [Fla Stats s 394.459 (3); also see Mo Stats s 202.840; Ga Code ss 88-502.2, 88-502.3; Ill Stats ch 91½ s 12-1; NY Mental Hyg Law s 15.03].

Such guarantees would appear to be enforceable in court, if necessary. However, criteria for judicial assessment of the adequacy of treatment received remains a problematic area (65).

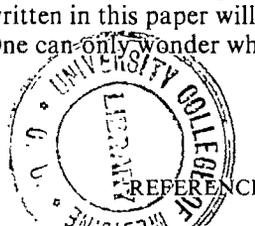
CONCLUSIONS

In one sense we have now come full circle in mental health law since the days of the "moral treatment" of the mentally ill. In those days admission to mental hospitals was selective and the unresponsive patient was turned away. Treatment was adequate, but only for the few. Now we are required to provide adequate treatment, but for the many. Fortunately, with the significant advances in the treatment of the mentally ill in the past 20 years, we should be able to make accelerated progress toward such a desideratum. This will require increased allotment of public resources for the mentally ill and the mentally retarded. However, much can be accomplished by the reallocation and more productive utilization of the resources we now have.

The role of the law that has emerged in recent years may be regarded as catalytic toward improving care and treatment for the mentally disabled. If some of the new statutes and case law appear to be excessively rigid or burdensome in their implementation, or if these reforms appear at times to be advanced by overly aggressive and overzealous lawyers, it is well to remember that there is no conflict regarding the ultimate ends to which all this energy is directed. Change is painful, but we know that it is both necessary and inevitable if we are to have progress.

It matters greatly, however, what the impact of change really is. It is of fundamental importance that the effects of these changes on the quality of people's lives and health be monitored carefully. Empirical follow-up of changes in mental health law is badly needed, and little has appeared in either the psychiatric or the legal literature. It is of great significance that the United States Supreme Court itself, beginning with the landmark school desegregation decision of 1954 (9) and most recently in *Jackson v. Indiana* (51) found such empirical studies to be persuasive in its decision making.

In closing we again underscore the dynamic, evolving nature of mental health law and the complex series of "experiments" that are now going on in this area. What we have written in this paper will therefore become dated rapidly. One can only wonder what new legal "romance" awaits us.



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A Hospital Riot: Its Determinants and Implications for Treatment

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Several factors were responsible for a riot on an inpatient treatment unit for delinquent adolescents: individual dynamics of patients and staff, group problems of patients and staff, and issues involving the entire patient-staff group. The unit is viewed as an open system comprising the individual dynamics of staff and patients as well as their interrelationships. Achieving and maintaining internal homeostasis are essential to that organism. The authors discuss the implications of their findings for hospital treatment.

WHEN HALF OF THE PATIENTS on an inpatient treatment unit for delinquent adolescents rioted, we took the opportunity to study the determinants of this collective disturbance. This paper describes the pertinent literature, the population of the unit, the riot and events leading up to it, interviews with patients and staff, a discussion of the riot as the interaction of an open system, and the implications for hospital treatment.

In the literature, treatment innovation, staff disorganization, and staff-patient boundary breakdown are described as setting the stage for rioting.

An innovative, more humanitarian approach may create destructive anxiety in both patients and staff if it is not worked through. An early description of this phenomenon appears in the book *Branch Street* (1). It relates that following the liberalization of policies by the leader of a London settlement house without concurrence of the staff, the deprived and delinquent children rioted, vandalized the house, and forced its closing. Previous work by one of us (R.C.M.) in a prison setting (2) led him to believe that riots may occur when institutional change happens without being fully accepted by either the staff or inmates. In a larger sense most social riots in the United States have been the result of the "reconstructivists" trying to effect change and the "nativists" trying to maintain the status quo, with no opportunities to work the issues out constructively (3).

In a treatment setting for delinquent girls Ruth Eissler (4) found that although individual delinquency seemed to be related to personal inner turmoil, mass delinquency was due to "dissension or tension among the supervising staff." The collective disturbances studied by Stanton and Schwartz (5) and by Offer and Barglow (6) all resulted in part from staff disorganization. The necessity of distance and the inadvisability of too much familiarity between staff and patients have been amply documented (7). If the gap narrows, adolescents will reestablish it themselves (8), often by provoking a limit-setting response. When patients test the limits of their omnipotence and the staff fails to respond realistically, riots result (9). Blurring of staff-patient boundaries may stimulate patient fantasies for intense parental care and closeness and may lead to panic (10) or some kind of assaultive behavior (4).

SETTING

The Illinois State Psychiatric Institute is a 150-bed state hospital devoted to training, research, and service. The Delinquent Adolescent Program (Michael Reese Unit) is a closed ten-bed research and treatment ward providing psychiatric, psychological, medical, nursing, and social services; activity therapy; school; and vocational counseling to hospitalized delinquents. The unit serves not only as the site of a research project (11–13), but also as a model for treatment innovation. It accepts male and female patients 13 to 17 years of age who are not psychotic, mentally retarded, or brain damaged. Delinquency is defined as overt or covert violation of the law and includes such offenses as theft, assault, vandalism, sexual promiscuity, running away, truancy, and drug abuse.

Most of the patients have had contact with the police, and many have already been held at detention centers or are on probation. Their behavior must be severe enough to necessitate hospitalization or institutionalization. The average length of stay is six months, and each patient is involved in individual psychotherapy, as well as group and family psychotherapy when indicated. The milieu program is structured around school, activities, commu-

Revised version of a paper presented at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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This work was supported by Illinois Law Enforcement grant A70-15.

The authors wish to acknowledge the assistance of Mr. Thomas Rosenwein, Research Assistant, Delinquent Adolescent Program, Illinois State Psychiatric Institute.

TABLE 1
The Delinquent Population

Patient	Age at Time of Admission	Socioeconomic Status (14)	Referral Source	Reasons for Referral
Rioters				
Donna A.	17	3	Mother	Dropout, disobedience to parents, sexual promiscuity, car theft, petty theft, drug abuse, runaway
Sam G.	16	4	Probation officer	Disobedience to parents, vandalism, breaking and entering
Mary V.	17	2	Mother and probation officer	Truancy, runaway, dropout, disobedience to parents, sexual promiscuity, prostitution
Edward Q.	14	6	Probation officer	Runaway, school adjustment problems, assaultive behavior
Stan I.	16	1	Social worker and family service agency	Runaway, car theft, homicidal threats, vandalism
Nonrioters				
Nick Q.	14	3	Private psychiatrist	Hyperactivity behavior problem in school, runaway, vandalism, breaking and entering, voyeurism
Selma E.	15	7	Probation officer	Truancy, runaway, sexual promiscuity, prostitution
Carl V.	16	5	Probation officer	Repeated car theft
Elizabeth Z.	16	2	Probation officer	Runaway, assaultive behavior, homicidal threats, sexual promiscuity
Olga O.	15	4	Probation officer	Runaway, defiance of parents

nity meetings, and limit setting. A ward staff consisting of two psychiatric nurses, seven mental health specialists (six men and one woman), and five mental health technicians (two men and three women) maintain the milieu structure. The patients living on the unit at the time of the riot are described in table 1.

THE RIOT[1]

About 7:15 one evening in the summer of 1971, after the evening community meal and the weekly group therapy session, the male specialist in charge took five patients (Nick, Selma, Carl, Elizabeth, and Olga) off the unit for activities on the first floor of the hospital. Two technicians, one male and one female, remained on the unit with Donna, Mary, Sam, Stan, and Edward, all of whom were restricted from leaving the unit for one reason or another. Sam had been sleeping through all the activities after supper. While the male technician was out on the unit, the female technician remained in the nursing station but ignored Donna and Mary, who began demanding her attention by knocking on the window. Eventually, Donna went into the music room and began breaking records. Mary soon joined in.

The female staff member, who described herself as "frightened and shaking all over," admonished them to stop, which they did temporarily. But later they resumed, and Edward, who now found himself "really getting along with the other kids," joined in. Sam, awakened by the noise, joined Stan in watching television in the dayroom adjacent to the music room. When Edward threatened to throw a record at the male staff member he was taken to his room, where he began shoving his furniture about. Eventually he calmed down and returned to the dayroom. The music room was then locked. Donna and Mary began climbing on chairs and tables, saying that they were "hyper." Mary began teasing Sam by tickling him and taunting him with sexual overtures. Donna and Mary mimicked both Sam and Stan, who eventually became hyper and began jumping around on furniture and yelling loudly. "All of a sudden it happened and everyone else was into it," Mary said. Several times the female staff member cautioned the patients to stop. "This is a warning period, or you will be put into restraints." Mary felt that this "just got us madder."

When Edward told the staff member to shut up, she decided that things were out of control and returned to the nursing station to call for the specialist in charge. While she was on the phone, he and the other patients coincidentally returned to the unit at about 8:15 p.m. and found the unit "in a shambles." He then summoned other staff and security police to the unit to place the patients in restraints. The five restricted patients secured chairs, bottles, and ashtrays and barricaded themselves at the end of the corridor in an attempt to resist the staff. When the other patients had returned to the unit, the rioters became even more agitated and tried to get them to join in, but they declined. The five nonrioters, the "good kids," attempted to dissuade the rioters, but failed. Edward pulled down a towel bar from the men's shower room, which Stan took away from him to use as a weapon himself. The staff advanced with mattresses to shield themselves from the flying bottles and broken glass. Sam and Stan removed themselves from the group and surrendered to the staff. Mary and Edward fought the staff fiercely, with Mary striking and biting several staff mem-

[1] This description is based on taped interviews that two of us (R.C.M. and D.D-M.) conducted with the involved patients and staff.

bers and Edward hitting and spitting. Donna sequestered herself in the girls' toilet and when confronted, struck and bit a staff member, who responded by calling her a "bitch." All the rioting patients were placed in restraints.

That night one of us (R.C.M.) interviewed the group cotherapists before advising them of the riot. As customary, the three staff members summarized and reported the evening activities; the next morning we interviewed the five riot participants; and again the next evening, the three staff members contemplated the events of the day before. These discussions were tape-recorded and evaluated.

On reflection, it was clear that the riot had been foreshadowed by a number of serious disruptions. The female staff member observed that "this has been building up for some time" and that another staff member on the weekend had prophesied that there would be trouble. The female staff member said, however, "I did not expect it from the girls." But all three agreed that Donna and Mary were definitely "behind the whole thing" and that Edward, Sam, and Stan had been involved by contagion.

Two weeks earlier nine patients had participated in a four-day camping trip with an equal number of staff members. Donna was not included because she had obtained employment in preparation for her discharge about five months hence. While camping, staff members disagreed about how to handle certain kinds of destructive behavior, as for example, what to do when Sam began to play with and eventually mutilate a frog he had found near the encampment. The camping leader saw this as horseplay, while other staff members saw it as emerging destructive behavior and loss of control. Some staff members wanted to deal with the patients' agitation by having a group meeting, while the camping leader preferred to set up a baseball game. Both were done; but staff differences persisted.

On the second night Mary burned a hole in her tent and attempted to run away, but was thwarted. Again, the camping leader and the staff members disagreed about meeting with the patients to discuss the issues. On the last day, one-to-one supervision of a group sight-seeing trip began to break down, while some staff members wondered whether they were there to enjoy the excursion themselves or whether their role was to facilitate the patients' enjoyment. In general, many staff members felt that there were no opportunities to share problems with each other or to influence the camping leader. On their return to the hospital some patients continued to test out the limits and boundaries of the staff; for example, on the day before the riot Sam punched a male staff member several times, and this had not been dealt with.

On the day of the riot one of the nine campers was discharged as planned, and she was replaced by a new patient, Olga. That evening, as usual, staff and patients ate supper together in the dayroom prior to the 5:30 to 7 p.m. weekly group therapy session. However, during the meal an occupational therapy (OT) student advised the staff member in charge that a knife was missing from the OT shop. This was discussed at supper, and it was decided that the unit would be placed on restriction until the whereabouts of the knife could be determined. That night several patients seemed eager to start the group meeting and banged on the door while staff members unlocked it. As they entered someone turned off the lights as a prank. Both cotherapists remarked later that they were uneasy about the meeting and found it very difficult to summarize the patients' interactions. The group talked about Edward and Nick's competition for Olga's attention. Carl explained periods of silence with "They are not responding because they are depressed." When Nick was asked by the female cotherapist what he wanted from the group, he replied, "sex," described later as, "maybe another underlying issue that they didn't talk about." Selma and Carl left the meeting about two-thirds of the way through and returned to the unit. The therapists generally felt helpless about what was going on.

Toward the end of the meeting there was some discussion about Debbie, an ex-patient who would be returning to the unit at 7 p.m. for her personal belongings. About one month before, Debbie had run away and was eventually discharged after failing to return. She and Donna had been close friends, much to the envy of Mary, who felt that the rivalry was "never solved." Debbie, Donna, and Mary had all demonstrated tenuous object relations and had difficulty making a commitment to treatment. Donna had turned 18 only one month before, had signed her own voluntary admission papers, and was no longer staying in the hospital by order of her parents, a situation that caused her much anxiety. She thought that Debbie was probably homesick for the hospital, but "I just hope she is happy." Mary had become quite angry when a staff member told her, "We don't even have a treatment plan for you here." She said that her treatment program was "fucked up," cried, and said, "I'm not sure if I want to get better, or can." The expected return of Debbie to the unit at 7 p.m. made several patients anxious.

After the group meeting a brief community meeting was held with the evening staff, and the staff member in charge decided to take the patients into the OT shop to look for the knife, since all insisted that no knife was really missing. In the course of the search the patients seemed to get louder, and Nick remarked that the OT student was mistaken and that the knife in question had really been kept in the nursing station. Although a similar knife was indeed found in the nursing station, there still remained some staff confusion. The OT student was unable to contact her supervisor, who had been away for several days because of a death in her family. The missing knife "scared" Stan because someone might cut himself or someone else. The staff member in charge changed his mind and decided not to keep the unit on restriction, but instead to refer the matter to the day staff the next day. He then took the five patients off the unit, leaving the other two staff members in charge.

DISCUSSION

The therapeutic milieu is an open system of component

parts interacting dynamically with each other and with the environment (15). In an attempt to achieve and maintain internal homeostasis, the milieu develops a culture and organization. The riot represents a disruption of that organizing ability in the homeostasis of the system. Individual patient dynamics, patient group problems, individual staff dynamics, staff group problems, and factors involving the entire patient-staff group all contributed to the homeostatic breakdown.

The culture of this program more closely approximates a hospital treatment unit rather than a prison or custodial institution despite the fact that when they were anxious, patients would attempt to provoke punitive staff responses and convert the staff into jailers or policemen. By and large, staff members had resisted these efforts, and the unit is seen by the staff as an active and exciting treatment facility, occupying a high status in the hospital hierarchy. Staff turnover is low, and vacant positions are quickly filled.

The closeness of a camping trip is often too stimulating for many patients, and after such an experience they need to test out whether limits and boundaries between staff and patients still exist.[2] If lacking, patients will provoke them or panic. Staff members may also find the camping experience too stimulating. Our staff members surrendered their treatment roles and became fellow campers, as evidenced by the breakdown of one-to-one supervision and by the confusion over how to transpose treatment principles from the unit to the campsite. Patients needed to test this out on their return to the unit. When a staff member was assaulted the night before and little was done, and when the staff was confused over the missing knife and the decision to restrict the unit, the patients' anxiety level rose to one of panic because they had lost the safety and reassurance of the fantasied omnipotence of the staff. Patients' acting out forced staff members to reexamine their roles and to function again as limit setters and structure providers, organizing factors in the environment.

When the staff views deviant behavior by patients as personal affronts by heretofore loving children, it is clear that roles have become blurred. Such closeness and confusion stimulate rage in object-hungry patients. Their fantasies of once again recapturing the good mother are stimulated excessively, and they become frustrated and disappointed because staff members cannot respond to their every need, even though they have seemingly promised to do so. Vandalism and assaults on the staff express such frustration and also serve to force the staff to reestablish a therapeutic distance and structure.

Patients who were taken off the unit had the opportunity to distance themselves from such closeness and dilute the intensity of the transference. But patients restricted to the unit were trapped and left with few avenues of discharge, and these very patients had already shown a lesser capacity to control and modulate their impulses. They were restricted to the unit because they had missed school or were unable to go to bed on time; they needed the structure of the unit, but this evening the unit failed them.

In the month before the riot the unit chief had been absent from the unit a good deal and had appointed an acting chief in his absence. He had not gone on the camping trip, but had appointed a second staff member as camping leader. The activities therapist, who was important to both the camp-out and the ongoing milieu structure, was now absent because of a personal loss. Both absences were felt by the staff, and they may have paralyzed the staff the night of the riot. The staff member in charge was confused about how to handle the missing knife incident. The group leaders were confused about the group interactions. The two staff members who stayed on the unit were confused about making decisions without the person in charge or even about calling him back to the unit.

The female staff member made several ambivalent attempts to intervene by warning the patients to stop and threatening them with restraints. Presenting such an alternative is ineffective in limit setting because the patients are thus invited to test the limits. This staff member was disappointed in the behavior of her favorite girls, who she believed could not possibly be doing the things she observed before her very eyes. When Edward told her to shut up, she realized that she was no longer a personal friend to the patients, but the object of intense transference. Only then did she call the person in charge back to the unit, but she did not believe that she had the authority to call for other help on her own.

The riot provoked a strong leadership response from the chief, forced the staff to reassert staff-patient boundaries, and reestablished in the milieu system a homeostatic organization in which the staff felt important enough to work productively and patients felt safe enough to grow.

Both rioters and nonrioters had alliances with their psychotherapists that ranged from poor to excellent, but the rioters had shown more breakdown of impulse control, as evidenced by their having been placed on unit restriction. In fact, during the eight days prior to the riot the rioters as a group showed considerably more delinquent behavior on the unit than the nonrioters, largely because of the activities of Edward, Sam, and Stan. Interestingly, they had been involved in the riot primarily because of hyperstimulation and contagion. Of all the ten patients the two instigators of the riot, Donna and Mary, were most liked by the staff and were not dealt with firmly when they began to act up. An earlier study of a riot (19) showed the rioters to be younger than the nonrioters, to be involved in more frequent and more serious delinquency at an earlier age, and to have presented more behavioral problems for the staff. In this study, when rioters and nonrioters are compared on the basis of socioeconomic status, age at the time of their first court hearing, number of prior arrests, number of incarcerations, and impulsivity, no differences are noted.[3]

[2] This view contrasts with the advocacy of such closeness on camping trips as therapeutic (16, 17) and the attribution of postcamping problems to depression over the loss of closeness (18).

[3] These data are available from the authors on request.

Donna, like Debbie before her, had considerable difficulty in making a commitment to treatment. Her longing for mothering from the female staff member with whom she wanted a special relationship was particularly stimulated that evening because of the anticipated return of Debbie, with whom she had been involved in a covert homosexual relationship, which was abruptly terminated when Debbie ran away from the hospital. Debbie's return stimulated in Donna confusion about her own capacity to make a commitment, anxiety about an intense relationship with a mothering figure, and once again the triangular competition between Debbie, Donna, and Mary. Donna had preferred to leave the hospital as she had often run away from her own home—in a state of disorder, anger, and disruption—rather than to deal with a gradual process of termination over the next several months. Mary was quite confused about her prognosis, and the staff was confused about her treatment plan. Debbie's return to the unit stimulated again her own confusion about whether or not she could be helped, as well as reawakening rivalrous feelings toward Debbie for Donna's favor. Both girls resolved their competition with each other by joining together in defying the female staff member and by provoking the three boys. At the same time they expressed their intense wishes for maternal control as well as their frustrations over their inability to be gratified, their treatment, and their prognosis.

The three boys, Edward, Sam, and Stan, had become involved by contagion. All had shown fragile controls of their impulses. Edward had demonstrated markedly psychotic thinking and behavior, although it had not been anticipated at admission. He had been unable to become a member of the peer group but now readily joined this new subgroup. Sam had struggled throughout his hospitalization with his own hostile and aggressive impulses and was prohibited from horseplaying on the unit. The fact that the night before the riot he had struck a staff member and this had gone without staff response must have only challenged his already tenuous impulse controls. Nonetheless, he attempted to remain aloof from the two instigating girls until their sexual provocativeness caused him to become agitated. Even then, with the show of force, he removed himself from the riotous situation. Stan has little identity of his own and little capacity for self-observation. He was frequently involved in whatever Sam did and became enmeshed in a contagious phenomenon.

IMPLICATIONS FOR HOSPITAL TREATMENT

It is necessary to maintain clear-cut staff boundaries in all phases of the inpatient treatment relationship with adolescents. Even "fun times" like camping are "work times" for staff, and they should include regular, at least daily staff meetings to discuss patient behavior and keep staff communication open. It is confusing to the adolescent when the staff befriends him in order to manipulate his behavior. It is important to maintain staff identity in the face of adolescents' demands. Therefore, staff members need time to meet with each other, to communicate feelings and thoughts openly, and to receive consistent support from each other and from the leader. A staff member must develop a strong identity as "staff" so that in his work he feels constant support and does not need to charm, seduce, bribe, or intimidate patients in order to survive in the system. The leader should communicate a definite philosophy of treatment with which the staff can work. Distinct authority lines enable staff members to test out their own limits with their supervisors and in turn enable patients to test their limits with staff.

Destructive aggression by patients, even if minor (such as flicking ashes on the floor), reflects an incipient loss of control and/or boundaries and must be taken seriously. If it is not stopped firmly, such behavior will lead to greater confusion, disruption, and contagion. It is interesting to speculate what would have been accomplished by taking Donna and Mary to their rooms as soon as they began breaking records.

Changes in policy or leadership must be discussed, worked on, and accepted by the entire working group, especially line staff. Otherwise, the ensuing confusion can easily lead to role diffusion, breakdown of communication, loss of control, contagion, and riot.

In some situations, open communication will lessen polarization and increase the likelihood of conflict resolution (20). But on the night of the riot, opportunities for communication could not be used. Daily ward meetings, regular group therapy sessions, and informal conversations on the unit or during meals are important, but they are not enough. The staff must respond behaviorally when patient behavior becomes disruptive. A homeostatic breakdown in one segment of the milieu organism must be countered with an organizing response from another segment.

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Questions of the Month

The group of questions below consists of five lettered headings followed by a list of numbered statements. For *each* numbered statement, select the *one* heading that is most closely associated with it. Each lettered heading may be selected once, more than once, or not at all.

Questions 1–4

(A) Mental Health Study Act
(B) Mental Retardation Facilities and Community Mental Health Centers Act
(C) National Mental Health Act
(D) Comprehensive Health Planning Act
(E) None of the above

1. Established the Joint Commission on Mental Illness and Health
2. Passed by Congress in 1963
3. Authorized the appropriation of more than $100,000,000 for research and treatment facilities for the mentally retarded
4. Authorized the appropriation of funds to finance the total construction cost of community mental health centers

(The Questions of the Month are from the Self-Assessment Program of the APA. The answers are supplied on page 652 of this issue.)

Psychiatry and Group Medical Practice: The Diagnostic Process, Referral Patterns, and Utilization of Services

BY JAMES W. CRAWFORD, M.D., PH.D., AND SUSAN CRAWFORD, PH.D.

Group practice has emerged during the past decade as a major organizational form for the delivery of health care. Psychiatry, however, has been found to be the least inclined of the larger medical specialties toward participation in such groups. The authors compare data on diagnosis and referral patterns from several groups. They found that short-term psychiatric care is consistently associated with a decrease in the utilization of ancillary and medical services within the group practice setting.

IN MORE THAN A DECADE of psychiatric practice within a medical group situation, one of us (J.W.C.) has observed that the rate of referrals to staff psychiatrists and psychologists by other members of the clinic seemed remarkably low. In addition, the number of psychiatrist colleagues who were members of other medical groups was noted to be small. An early study by Jackson supports these observations (1), as do other experiences with group clinic staff members. In view of the rapid growth of group practice during recent years, as well as experiments in the organization of manpower for the delivery of health care, it was decided to survey the experiences of other group practice clinics and to conduct a small-sample study on the practice of psychiatry within a group practice setting.

GROUP PRACTICE AND SPECIALIZATION

The group practice of medicine is an organizational form for the delivery of health care that is in large part a response to specialization and the fragmentation of services. Group medical practice is defined by the American Medical Association (AMA) as "the application of medical services by three or more physicians formally organized to provide medical care, consultation, diagnosis, and/or treatment through the joint use of equipment and personnel, and with the income from medical practice distributed in accordance with methods previously determined by members of the group" (2). During the past decade, the number of medical groups in the United States has increased by more than a factor of four (3). In 1959, AMA identified a total of 1,549 medical groups and by 1969, a total of 6,371 groups that satisfied their definition. The groups range in size from three physicians to more than 850, with an average of 6.3 physicians. The majority of the groups are small; 4,454 (85.6 percent) have fewer than seven members, while 303 (4.7 percent) have more than 16 members.

In 1969, a total of 40,093 nonfederal physicians, excluding inactive physicians, interns, and residents, were in group medical practice on a full or part-time basis. This represents 17.6 percent of the total physician population. Figure 1 indicates the percentage of physicians who are in group practice within each of the larger specialties (those with more than 9,000 physicians).

The data clearly indicate great differences among the specialties in their inclination toward group practice. Radiology and anesthesiology have the largest proportion of members in group practice—48 percent and 35 percent, respectively. Among the larger specialty groups, psychiatrists are the least inclined toward group practice, with only 955 practicing psychiatrists (6.3 percent) affiliated with a group. Among the 6,371 medical groups in the United States, only 275 (4.3 percent) have one or more psychiatrists.

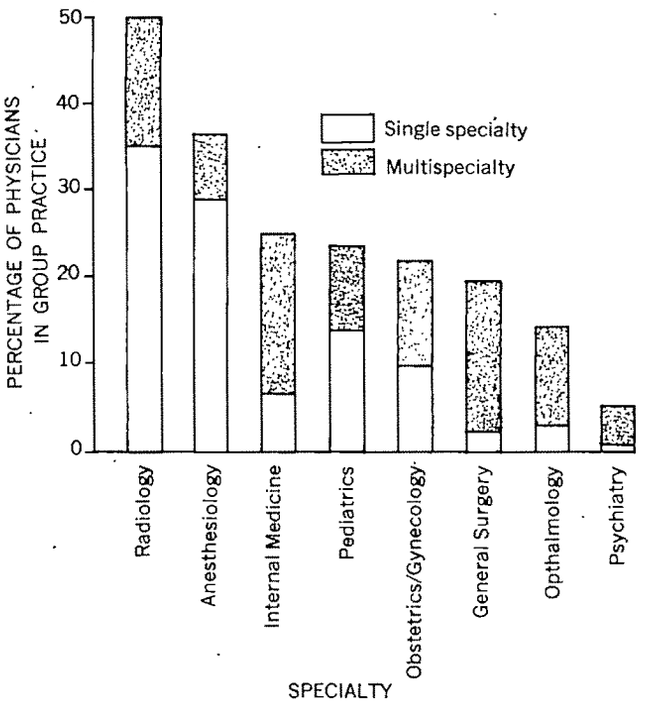
PSYCHIATRY IN SINGLE-SPECIALTY AND MULTISPECIALTY GROUPS

Of the 275 specialty medical groups with one or more psychiatrists, 65 (24 percent) are single-specialty groups, i.e., groups in which all members are psychiatrists. A total of 319 psychiatrists practice in such groups. As indicated in table 1, these single psychiatric specialty groups tend to be small, ranging from three psychiatrists to 15. More than 59 percent belong to groups with three to five members, and 41 percent belong to groups with six to 15 members. In the 1969 data, which are the latest available on a nationwide basis, there were no specialty groups in psychiatry with more than 15 members. There are, however, indications of a tendency toward larger single-specialty groups; one psychiatric group in Washington, D.C., has recently been reported to have 23 members. A second survey of this universe, to be conducted by AMA in 1973, will provide longitudinal data on this aspect of organization in psychiatry.

There are a total of 2,418 multispecialty groups, i.e.,

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FIGURE 1
*Percentage of Physicians in Group Practice by Specialty**



*The data were obtained from Todd and McNamara (3).

groups that provide services in at least two major specialties or fields of practice. Of these, 210 (about ten percent) have one or more psychiatrists. A total of 636 psychiatrists practice in multispecialty groups. As indicated in table 1, there is a positive relationship between the size of the group and the probability of having staff psychiatrists: 23 percent are in groups with 15 or fewer members, while 77 percent are in groups with 16 or more members.

Longitudinal data on psychiatry in group practice present problems in comparison. Compilations by the American Association of Medical Clinics (AAMC) (4), U.S. Public Health Service (5), and AMA are based upon varying definitions of "group" and differing survey universes. In 1956, a review of multispecialty clinics that were members of AAMC identified a total of 37 clinics with staff psychiatrists (1).

In summary, of the major specialties, psychiatry has the smallest proportion of members in group practice, both single specialty and multispecialty. Psychiatrists tend toward solo practice. Only 6.3 percent of all practicing psychiatrists are affiliated with a group, and 4.3 percent of all of the medical groups in the United States have one or more psychiatrists. Among the 2,418 multispecialty groups, only about ten percent have psychiatric staff members.

DIAGNOSIS OF PSYCHIATRIC OR EMOTIONAL PROBLEMS IN MULTISPECIALTY GROUP PRACTICE

Three studies have yielded quantitative data on the percentage of patients diagnosed as having psychiatric problems by nonpsychiatrist physicians in group practice. These investigations, which are listed in table 2, are only generally comparable since there is variation in socioeconomic class, prepaid plan benefits, definition of psychiatric or emotional problems, criteria for selection, and the size of the population.

Goldberg, Locke, and associates (6, 8) conducted a three-and-a-half-month study to determine the extent to which physicians in departments of internal medicine, pediatrics, allergy, and dermatology of the Group Health Association (GHA) in Washington, D.C., diagnosed their patients as having psychiatric problems. Of 6,104 patients 15 years old or older, 889 (14.6 percent) were diagnosed as having "mental" or "emotional" conditions. The authors found "substantial" differences in rates of psychiatric illness reported by participating physicians that they believed reflected patient preference, physician attitudes, diagnostic skill, and the time of year the survey was done. They also found a positive correlation between the number of visits a patient made during the previous 12 months and the probability of his having a psychiatric problem. They further observed a positive relationship between rates of psychiatric problems and the length of time the physician and patient had known each other.

Fink and associates (9) studied changes in psychiatric

TABLE 1
*Psychiatrists in Group Practice by Type and Size of Group**

	Single-Specialty Group (N = 65)		Multispecialty Group (N = 219)		Total Number
Group Size	Number	Percent	Number	Percent	of Psychiatrists
3–5 members	188	59	51	8	239
6–15 members	131	41	96	15	227
16–19 members	—	—	170	27	170
More than 20 members	—	—	319	50	319
Total	319	100	636	100	955

*The data were obtained from Todd and McNamara (3).

TABLE 2

*Percentage of Patients Diagnosed by the General Staff In Three Group Practice Clinics as Having Psychiatric or Emotional Problems**

Group Plan	Type of Plan or Benefit	Population Characteristics	Total Number Screened	Percentage Diagnosed as Having Psychiatric or Emotional Problems
Group Health Association, Washington, D.C.	Prepaid group practice just prior to inclusion of psychiatric care benefits	Government employees, transit workers, general population	6,104	14.6
Jamaica Medical Group of Health Insurance Plan of Greater New York	(1965) Prepaid group practice program with free psychiatric consultation services only	Queens Borough in New York City. Lower-middle socioeconomic class; 25 percent black	**	4.2
	(1967) Prepaid group practice program with free psychiatric therapy included among benefits	Queens Borough	**	4.8
Field Clinic, Chicago, Illinois	Private group practice clinic. Fee-for-service paid directly by patient or through separate insurance plan	Middle socioeconomic class, predominantly German ethnic stock	500	15.0

*Data based on various sources (6–9).

**Data not available.

services before and after the addition of psychiatric treatment at no cost to the patient in the Jamaica Medical Group of the Health Insurance Plan of Greater New York (HIP). In 1965, when the benefits consisted of only psychiatric consultation and diagnosis, the proportion of patients 15 years old and older who were given a psychiatric diagnosis was 4.2 percent of all patients seen during the three-month period studied. With the addition of psychiatric treatment in 1967 at no cost to the patient, those diagnosed as having psychiatric problems remained relatively the same—approximately 4.8 percent.

Crawford (7) surveyed 500 consecutive patients who visited a private group-practice clinic. The physicians were requested to fill out questionnaires indicating whether their diagnoses were judged to be "organic" and/or "emotional" in origin. Additional information on decisions to refer, treatment, and use of drugs was also collected. This clinic differed from those of the previous studies in that payment was required in the form of fee-for-service either through a private insurance plan or direct payment by the patient. Of the 500 patients screened, approximately 15 percent were judged as having some form of emotional problem.

Jackson (1), in an early survey of the Palo Alto Clinic (1956), reported that although 92 percent of the clinic physicians estimated that between ten and 50 percent of their patients needed psychiatric help, only one referral was made per 1,000 patient visits. He further reported that this figure was "even more startling when it is combined with the fact that 60 percent of these patients are referred by 16 percent of the clinic staff" (1).

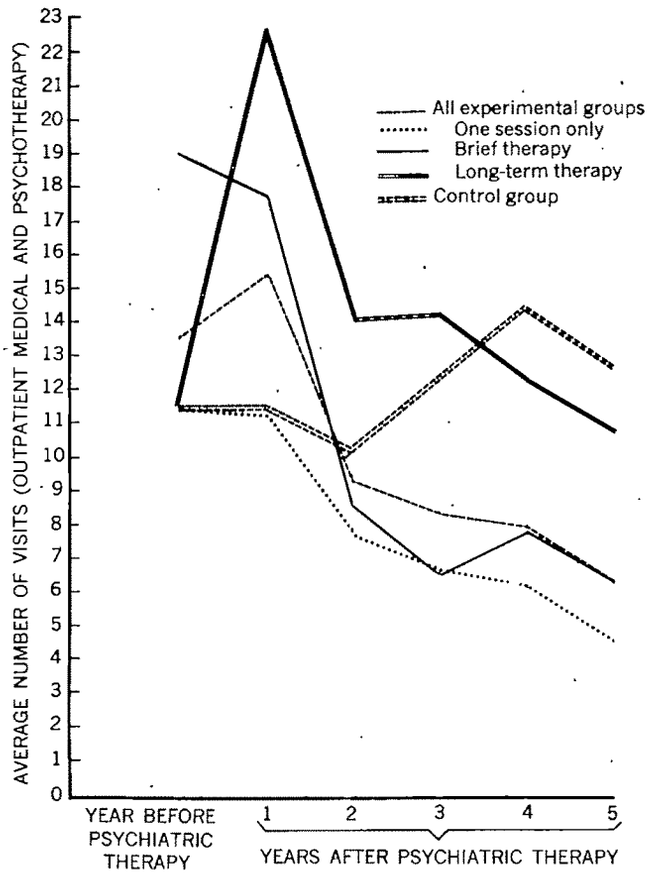
These statistics on the diagnosis of psychiatric problems are interesting, first, for their variation among the three groups, which ranges from 4.2 percent through 15 percent. This rate of variance refers only to patients who come to the clinics for treatment and not to an entire population of eligible persons under a prepaid plan or within a geographic area. Estimates of the incidence of mental illness among the general population range from a 23.4 percent "impairment rate" in the midtown Manhattan study (10) to 50 percent "currently suffering from psychiatric disorder" in the Stirling County study (11). Second, the estimates are lower than those projected in the general population studies. However, the problem of validity in epidemiological studies of mental illness has not as yet been satisfactorily solved, and there is not an adequate baseline for comparison (12, 13). Whether or not the data indicate that a large proportion of psychiatric problems are not recognized or diagnosed is an area for further investigation; however, this has been the general opinion.

PATTERNS OF REFERRAL

The patterns of psychiatric referral by group physicians were investigated by two groups. In the GHA study (8) it was indicated that only 17 percent of those diagnosed as presenting psychiatric problems were referred for therapy, mostly to psychiatrists. However, the physicians reported that there was another 18 percent for whom they made no referral, although they felt that this group needed additional psychiatric treatment. The major reason given by the physicians for nonreferral was that they felt it would not be acceptable to the patient. Another reason they thought important was that referral was not feasible, mainly for financial reasons.

The HIP study (9) surveyed referral patterns when

FIGURE 2
*Average Number of Combined Medical and Psychiatric Outpatient Visits for Experimental and Control Groups**



*These data were adapted from Follette and Cummings (14).

only consultation and diagnostic services were available (1965) and after psychiatric therapy had also been offered (1967). Of those diagnosed as having psychiatric problems, the number referred to psychiatrists was also low in this study, but there was a small increase—from 22 percent in 1965 to 26 percent in 1967. A high percentage of patients (68 and 67 percent) were not referred to the clinic staff psychiatrist for various reasons. The family physician treated a large proportion of these. In some cases he was still in the process of diagnosing the patient at the time of the survey; other patients were judged not seriously ill enough for special treatment or were already in psychiatric treatment elsewhere. Ten percent of the cases in 1965 and seven percent in 1967 had doctor-patient discussions about the possibility of a referral, but no referral was made because of the patient's refusal to see a psychiatrist.

Of the patients who were referred for psychiatric treatment, both studies found that some of them rejected the referral. Of those referred to psychiatrists in the HIP study, this figure ranged from nine percent in 1965 to 14 percent in 1967. In the GHA study the psychiatrists selected about 50 percent of the referrals for psychiatric treatment and found that 35 percent of this group rejected psychiatric care.

Both studies found that general physicians spent considerable time discussing emotional problems with their patients diagnosed as having psychiatric problems. The GHA study reported that about 63 percent of this group received counseling. The rate was even higher in the HIP study. Family physicians reported having one or more discussions with 88 percent of the patients diagnosed as having psychiatric problems during the 1965 period, with a decrease to 76 percent in 1967 after therapy was made available.

The general physicians also prescribed psychotropic drugs to a large proportion of patients with emotional problems. In the GHA study prescriptions were written for 75 percent of this group. The HIP study reported rates of 78 percent in 1965 and of 79 percent in 1967.

In the two periods investigated, however, the HIP study found an increased tendency to refer to psychiatrists: 1) patients with conditions described as "less serious," 2) a wider range of emotional conditions, and 3) patients with problems judged likely to improve with professional care. In addition, the range of drugs prescribed increased, and the number and duration of discussions concerning psychiatric problems with patients decreased with the addition of psychiatric therapy services. A significant finding of this study was the increase in the psychiatric consultation rate (those referred to the psychiatrist for consultation but not treatment) from 7.0 per 1,000 eligible patients in 1965 to 11.0 per 1,000 in 1967. In 1969, when the demonstration project was discontinued, the consultation rate dropped back to 7.8 per 1,000, which is rather low.

UTILIZATION OF MEDICAL SERVICES

There have been three studies (Kaiser Foundation, GHA of Washington, D.C., and HIP of New York City) relating utilization of nonpsychiatric services before and after the introduction of short- or long-term psychiatric services as a prepaid benefit in a group medical setting. The methodology of all three studies was based upon a before-and-after census of utilization of physician and ancillary (X-ray and laboratory) services after psychiatric referral or service. We attempted a tabulation comparing the findings of these studies but did not find it to be appropriate since the studies differ in their definition of psychiatric care, follow-up time, population sampling, and rating scales.

Kaiser Foundation Plan

The Kaiser Foundation Plan (14) in northern California studied outpatient and inpatient medical care and psychiatric service utilization of three groups of psychotherapy patients. Every fifth psychiatric patient was an experimental subject, a total of 152 patients selected over a one-year period. The patients were stratified into three groups by the number of sessions they had a year: one interview only, brief therapy (mean of 6.2 interviews),

and long-term therapy (mean of 33.9 interviews). Each patient's utilization of health facilities was investigated first for the full year preceding the day of his initial interview and then for each of the succeeding five years beginning with the day after his interview. A control (nontherapy) group was selected for the corresponding years of the study, and utilization scores were based upon the total number of separate outpatient contacts and days of hospitalization.

The results of the Kaiser study indicated a great decline in medical utilization for the experimental group when compared with the control group, whose utilization increased slightly over the six years. This decline was apparent whether the measures used were the number of outpatient visits, days of hospitalization, or a combination of these with psychotherapy services.

Figure 2 illustrates the numbers in the three experimental subgroups who received outpatient care, expressed as averages for each subgroup combining medical and psychiatric visits. For the single-interview and brief psychotherapy groups the greatest decline in use was during the second year of therapy, followed by slight but continuous declines over the remaining years of the study. For these brief therapy groups the psychiatric visits surprisingly never quantitatively replaced or exceeded the number of outpatient visits made before psychotherapy. The long-term psychotherapy group also showed the greatest decline in use of services during the second year of therapy, followed by a leveling off and again a slight decline. In contrast with the brief psychotherapy patients the number of visits by long-term therapy patients after the first year of therapy either never decreased significantly from or slightly exceeded the number of visits before psychotherapy. These, of course, were probably higher risk patients, and this figure combines all outpatient visits, medical and psychiatric.

Inpatient care (days of hospitalization) showed steep declines for all experimental groups during the first year of therapy, followed by continuing but less severe declines in the second year and then a leveling off (see figure 3). For the one-session and brief psychotherapy groups there is a 60-percent decline in hospitalization between the year before and second year of therapy (significant at the .01 level). The decline in utilization is most dramatic for the long-term therapy group; it dropped approximately 88 percent from the year before therapy to the second year after therapy (significant at the .01 level). There was no significant difference in hospital utilization for the control group over the five years studied.

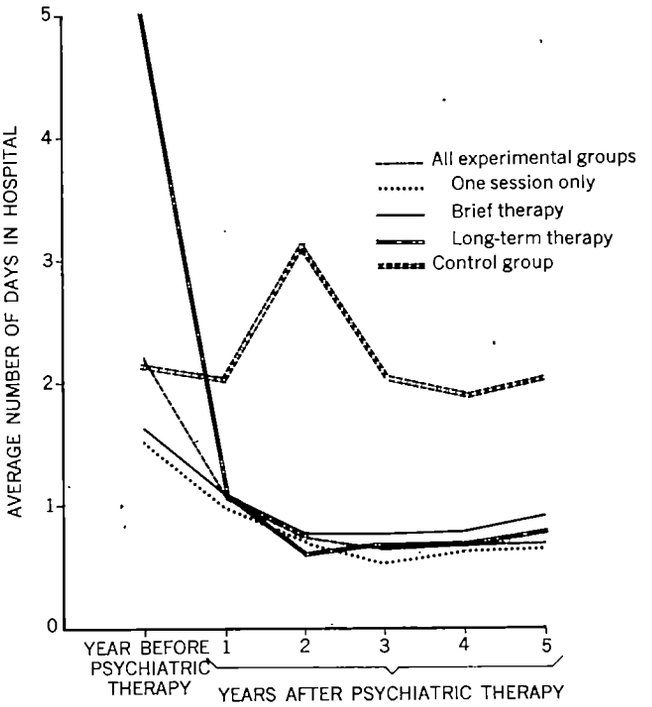
Group Health Association

The Group Health Association study (6) was limited to utilization of laboratory, X-ray, and nonpsychiatric services before and after each patient was referred for short-term psychiatric therapy over a period of two years. Data regarding the number of patients seen and the number of visits made were obtained on 256 patients.

The GHA study found that in the year after psychiatric referral there was a 13.6 percent reduction in the number of experimental-group patients who utilized the services

FIGURE 3

*Average Number of Days of Hospitalization for Experimental and Control Groups**



*These data were adapted from Follette and Cummings (14).

of nonpsychiatric departments; there was also a 15.7 percent reduction in the number who used laboratory or X-ray services. Over the same period the number of visits decreased by about 30 percent both for physician services and for laboratory or X-ray procedures. When the patients were analyzed according to age, race, sex, psychiatric diagnosis, and length of therapy, a consistent pattern of reduced utilization was observed. In comparison, data on the use of all GHA medical, laboratory, and X-ray services for the total population showed a per capita increase for the years 1963–1966.

Health Insurance Plan of Greater New York

The Health Insurance Plan of Greater New York (9), in an unpublished report to the National Institute of Mental Health, reported "some tendencies pointing to lower medical utilization in the group [of patients] to whom psychotherapy was available." The HIP study was a demonstration project that focused primarily on referral, utilization of psychiatric services, and staffing patterns of a mental health service in a prepaid group practice program. Because of methodological considerations, the investigators regarded that portion of the study on utilization of general medical services as "exploratory only."

In summary, these three studies found that short-term psychiatric care was associated with decreased utilization as measured by: 1) the number of patients requesting lab-

oratory, X-ray, and nonpsychiatric medical services, and 2) the number of patient visits for those services. In addition, the Kaiser Foundation Study demonstrated that for all of the psychiatric patients in their experimental group there was a decline in the number of visits even when both medical and psychiatric visits were combined. Of even greater significance is their demonstration of a dramatic decline in inpatient care. The consistency of these findings raises important questions concerning the nature and quantity of health care utilization.

Thus, the availability of psychiatric care on an equal basis with other treatment modalities seems not to increase expenses, as many fear, but to lessen overutilization of related services and inefficient use of highly trained practitioners. These findings merit more intensive investigation for their significance in planning services, particularly psychiatric coverage in health maintenance organizations and other medical care plans. Yet, regarding the five major national health insurance proposals currently before Congress, Gibson reported a tendency to keep mental health benefits minimal (15).

DISCUSSION

Over the past decade the number of medical groups in the United States has increased by a factor of four, currently involving over 40,000 nonfederal physicians. These provide a setting for continuing, comprehensive care that has the potential for minimizing fragmentation of services inherent in specialization.

Of all the major specialties, psychiatry was found to have the lowest number of members participating in groups. Investigations of diagnostic and referral patterns in group practice have been rather disheartening due to the low number of psychiatric patients diagnosed by general physicians and the small number referred to psychiatrists. Concurrently, the data in all three groups studied indicated that short-term psychiatric care was associated with a significant decrease in the utilization of other medical services. One study found an overall decline in the use of combined medical, psychiatric, laboratory, and X-ray services.

Other advantages of group practice have been documented. It increases the opportunity for contact between psychiatrists and other physicians who are an important primary contact in a patient's move toward psychotherapy. The notion of a "filter-down" process (16) begins with the patient's use of a family physician, the latter's diagnosis of a psychiatric condition, and referral to a psychiatrist. Goldensohn and associates (17) found that in group medical practice the family physician tended to refer more patients from population groups not otherwise likely to reach the psychiatrist in a system based upon self-referrals alone. These include the less educated and lower socioeconomic classes, those who hold less positive views of psychiatry, and those with emotional problems that they judge not to interfere severely with their life situation.

Some of the dynamics underlying the relationship of psychiatrists in group practice have been explored by Jackson (1) and Follette and Cummings (14). Both refer to the ambivalent position of psychiatry in relation to the rest of medicine. Goldensohn and associates, however, reported positive results in an expanded program of education and communication with family physicians (17). Jackson further observed that the "younger doctors differed significantly from their older colleagues in attitude toward psychiatry and the percentage of patients [they saw] needing help."

Clearly, there are advantages in systems that minimize fragmentation of services, open up communication among specialists, and reduce overall utilization rates. As we tend to move toward group practice as a major organizational form for the delivery of health care, it is important to understand the role of the psychiatrist in such a setting, his relationship to his peers, and his significance in the medical care equation. In summary, psychiatric services tend to keep down the overall costs of medical care and, in large group settings that are characterized by efficiency and anonymity, to contribute a humanistic aspect to medical practice.

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A Year's Experience in Student Mental Health at West Point

BY RICHARD C. U'REN, M.D., LT. COL. FRANCIS E. CONRAD, MC, USA, AND COL. PETER H. PATTERSON, MC, USA

A one-year study at West Point revealed that most cadets seen in the mental hygiene service did not have symptoms indicative of a major psychiatric illness; many were diagnosed as having adjustment reactions. Similar findings have been reported among students at civilian institutions. However, the cadets had lower rates of self-referrals and diagnoses of personality disorder and higher frequencies of suicide gestures and psychophysiological reactions.

THE U.S. MILITARY ACADEMY was the first college or university in the United States to have a full-time student health psychiatrist. Harry Kerns was appointed to West Point in 1920 and reported on his experience there a short time later (1). Since that time there has been a lack of information about student mental health not only at West Point, but at the other military service academies as well. This paper describes activities in the Military Academy's Mental Hygiene Consultation Service during the 1970–1971 academic year (half a century after Kerns was appointed) and illustrates some of the important differences between mental health operations at the Military Academy and at other educational institutions.

Between July 1, 1970, and June 30, 1971, the enrollment at West Point was approximately 3,780. Of this number 1,375 were new cadets (freshmen or first-year men), who arrived on the first day of July for two months of rigorous physical and military training prior to the beginning of the academic year in September. This two-month period is also a time of rapid assimilation into the culture of the Military Academy. The responsibility for this program is borne by upperclassmen, who are closely supervised by a group of selected Army officers called tactical officers. This period, called New Cadet Barracks, is a particularly stressful part of the West Point experience.

Cadets who wish counseling services have a choice of several facilities on post: the Mental Hygiene Consultation Service, which is located in the hospital; the Counseling Office, which is located in the barracks area; and the Protestant and Catholic chaplains' offices. Although cadets may seek help directly from the Mental Hygiene Consultation Service, they have been encouraged in the past to talk first to their tactical officers who, in turn, may refer the cadet to one of the counseling facilities.

Frequently, the tactical officer will choose to refer the cadet to the Counseling Office, which is staffed by regular Army officers with graduate degrees in psychology or counseling. A subsequent referral may be made to the Mental Hygiene Service if additional evaluation, treatment, or hospitalization is thought to be necessary. The Counseling Office, in addition to its counseling duties, routinely interviews all resignees from the Academy. In the past year the Counseling Office interviewed 576 men; approximately half were seen for routine resignation interviews, and the rest were counseled for a variety of reasons. Of these, eight percent were self-referred and 2.4 percent required referral to the Mental Hygiene Service.

The Protestant chaplain's office counseled approximately 70 cadets during the year, only one of whom was referred to the Mental Hygiene Service. There are, of course, others to whom a cadet may go for advice and counseling in less formal ways; his tactical officer and other officers, the cadet hostess, and the Catholic chaplain are among those commonly used.

The Mental Hygiene Consultation Service, which has steadily expanded in the past year, is now staffed by two psychiatrists, one psychologist, one social worker, and two psychology/social work specialists. This unit serves the entire West Point community; only 21.4 percent of the new patients seen in the 1970–1971 year were cadets. Table 1 gives a brief summary of the operations of the Mental Hygiene Consultation Service during the 1970–1971 year. There was a total of 2,525 outpatient visits and an average of 4.6 interviews per patient. Excluding cadets, 30 people (6.9 percent) were hospitalized.

This paper focuses exclusively on the cadet population.

DIAGNOSTIC BREAKDOWN AND SOME COMPARISONS

Table 2 shows the breakdown, by diagnosis, of the 119 cadets seen from July 1, 1970, to June 30, 1971, in the Mental Hygiene Consultation Service.

Table 3 illustrates how diagnoses at West Point compared with diagnoses reported in the literature from other student mental hygiene units (2, 3).

For several reasons it is difficult to compare diagnoses from one facility to another. First, there are idiosyncrasies in diagnosis specific to individual clinics. Second, a majority of the reports from other mental hygiene consultation units are based on a coeducational population; West Point, thus far, enrolls only men. Third, graduate

At the time this work was done, the authors were all with the U.S. Army Hospital, U.S. Military Academy, West Point, N.Y., where Dr. U'Ren, a former Major in the Medical Corps, was Chief of the Mental Hygiene Consultation Service, Lt. Col. Conrad is currently Chief of that Service, and Col. Patterson is Chief of Professional Services. Dr. U'Ren is now Director, Psychiatry Outpatient Clinic, University of Oregon Medical School, Portland, Ore. 97201.

TABLE 1
Mental Hygiene Consultation Service Operations: July 1, 1970–June 30, 1971

Classification of New Patients	Number = 555	Percentage of Total	Usage Rate per 1,000
Active-duty personnel	182	32.9	82.0
Enlisted men and women	159	28.6	114.0
Officers	23	4.3	28.2
Active-duty dependents	158	28.4	35.4
Cadets	119	21.4	31.7
Retired personnel and dependents	96	17.3	—

students are included in statistics reported by most facilities, and there is evidence that they are overrepresented in the clinic population (3, 4).

Nevertheless, tables 2 and 3 are instructive. For a variety of reasons adjustment reaction of adolescence was diagnosed frequently. According to the second edition of the *Diagnostic and Statistical Manual of Mental Disorders* (5), the main criteria for this diagnosis are the following: 1) there is an absence of serious underlying mental disorder; 2) symptoms represent a response to overwhelming stress; and 3) symptoms disappear as the stress diminishes.

The frequency of this diagnosis reflects a generally high level of adaptability among cadets. West Point tends to attract young men who are upwardly mobile, "who have to depend upon their merits to achieve success, and who ... have *already* met the challenge of academic work, peer group relations, and athletic competition" (italics added) (6). There is a great deal of preselection in application to West Point. Adolescents who are introverted and nonathletic would probably not apply to any of the service academies. Furthermore, in situations where questions arose with regard to classification, the less prejudicial diagnosis was chosen, since psychiatric reports may end up in a cadet's personal file.[1] Anxiety as a clinical phenomenon was, therefore, almost always classified as an adjustment reaction rather than as a neurosis. The frequency of this diagnosis, however, is not surprising in an environment as stressful as West Point. Many times, in fact, the following statements were made in the diagnostic paragraph in order to underline this conservative attitude toward diagnosis:

1. "No psychological illness."
2. "Adjustment reaction of adolescence as manifested by ...."

From table 3 one can see that the diagnosis of adjustment reaction/transient situational reaction of adolescence is also made frequently in other mental hygiene clinics. At West Point, as at civilian colleges, the incidence of serious psychiatric disorders, e.g., psychoses, is very low.

Table 2 does reflect the existence of early stresses at West Point. Eleven suicide gestures among 1,375 new cadets (eight per 1,000) in a two-month period is high. We were often reluctant to call many of the minor gestures

TABLE 2
Diagnostic Breakdown of Cadets Seen in the Mental Hygiene Consultation Service: July 1, 1970–June 30, 1971

Condition	Number = 119	Percentage of Total
Adjustment reaction of adolescence	36	30.2
Anxiety	25	
Depression	8	
Fatigue	3	
Psychophysiological reactions	15	12.6
Gastrointestinal disorder	8	
Disorder involving bone/muscle/soft tissue	2	
Syncope	3	
Headaches	2	
Suicide gestures	15	12.6
Drug overdose	6	
Drinking "Brasso"	6	
Cutting with knife or glass	3	
Conversion reactions	3	2.5
Personality disorders	5	4.2
Sociopathic	1	
Paranoid	1	
Compulsive	1	
Pseudologia fantastica	2	
Psychoses	2	1.6
Sexual problems	4	3.3
Cadets referred for evaluation	20	16.8
Sleepwalking	4	
Drinking	1	
Marijuana	2	
AWOL	2	
Poor aptitude	7	
Hypersomnia	1	
Exhibitionism	1	
Incontinence	1	
Masturbation	1	
Other	4	3.3
Posttraumatic syndrome	2	
Stuttering	1	
Epilepsy	1	
Advice	10	8.4
No psychiatric diagnosis	4	3.3
Unknown	1	0.8

[1] For a general discussion of this problem in colleges, see Szasz's article "The Psychiatrist as Double Agent" (7).

TABLE 3
Comparison of the First Five Most Prevalent Diagnoses Made in Student Mental Health Facilities

West Point (One-Year Period, N=119)		University of Indiana (One-Year Period, N=647 [2])		University of Illinois (Ten-Year Period, N=4,547 [3])	
Diagnosis	Percentage of Total*	Diagnosis	Percentage of Total*	Diagnosis	Percentage of Total*
Adjustment reaction of adolescence	30.2	Adjustment reaction of adolescence	26.3	Personality disorders	36.3
Psychophysiological reactions	12.6	Personality disorders (passive-aggressive)	14.8	Transient situational reactions	22.2
Suicide gestures	12.6	Transient situational disorders or absence of psychiatric disorder	19.0	Psychophysiological reactions	6.3
Personality disorders	4.2	Schizoid personality	12.0	Schizophrenic reactions	5.2
Sexual problems	3.3	Depressive reactions	4.7	Special symptom reactions	0.6

*Percentages do not total 100 percent because only the first five diagnoses in order of frequency are listed.

TABLE 4
Comparison of Various Statistics in Several Mental Health Units

Item	West Point	University of Illinois (3)	Harvard	National Figures
Usage rate (number/1,000/year)	31.8	28.4*	110 (17)	44.7 (18)
Diagnosed emotional disorders (number/1,000/year)	23.8	17.6**	—	—
Psychoses (number/1,000/year)	0.53	1	2 (17)	1.0 (19)
Suicides (number/100,000/year)	0	—	***	7.2 (17)
Average number of interviews per student	3.6	4.8	5 (20)	4.2 (18)

*21.8 on the basis of ten-year statistics.
**Undergraduates only.
***Four suicides per 15,000 student body (1969–1970) (20).

we saw "suicide" gestures.[2] During July and August not one cadet was seen who seriously wanted to take his own life. Rather, a suicide gesture was a deliberate act made by a cadet who felt that his request to resign from the Academy was being ignored. Nonetheless, all suicide gestures were taken seriously regardless of conjecture about motivation. Ten of these 11 men resigned from the Academy before the end of the summer. Through communications with psychiatrists previously stationed at West Point, we learned that only one cadet has successfully completed suicide since July 1965. This particular man was away from the Academy when he killed himself, and he had not previously come to the attention of the Mental Hygiene Consultation Service. We estimate that there have been 49 suicide gestures at West Point since July 1965. In that time, the Corps of Cadets (the student body) has expanded from approximately 2,700 to 3,700 men.

Three cadets were diagnosed as having conversion reactions. The first had an amblyopia associated with a religious conflict; he regained his sight in the affected eye four months after leaving the Academy. The second had a temporary aphonia and later resigned. The third, who remained at West Point, had a leg paralysis that lasted only a short time.

The frequency of psychophysiological reactions was high (tables 2 and 3), and two-thirds of them occurred during July and August. It has become axiomatic that if a cadet remains a week in the hospital (on the medical service) with persistent gastrointestinal symptoms and no demonstrable etiology, he has a conflict about being at West Point. Kerns, in 1923, put it this way:

> No system can take a group of young men, dress them alike, teach them alike, drill them alike, and grind them through the same machine, without breaking a few of them. Fortunately conditions for observation and general supervision of cases could hardly be better. The medical department is the one flexible link in the military chain; the doctor is custodian of the keys that open the door to escape; the hospital is the safety valve.... The schedule is so rigorous that the cadet is only too glad to consult the physician upon the slightest pretext, in the hope that he may be excused from drill or be admitted to the hospital for a few days' rest (10, p. 690).

As evidence that the Medical Department is still used as a flexible link, approximately 3,780 cadets made 15,120 visits to sick call during the 1970–1971 year. Oc-

[2] Statistics documenting the ratio of attempted suicides to completed suicides among men aged 17 to 23 are hard to find. Among adolescents this ratio has been estimated to be from 7:1 (8) to 50:1 (9). It is difficult to understand why statistics on suicide gestures and suicides are not included in reports from the larger mental hygiene facilities (2, 3).

TABLE 5
Comparison of Referral Sources to Student Mental Health Units

West Point (One-Year Period, N=119)		University of Illinois (Ten-Year Period, N=4,547 [3])		Indiana University (One-Year Period, N=647 [2])	
Referral Source	Percentage of Total*	Referral Source	Percentage of Total*	Referral Source	Percentage of Total*
Health service physicians and emergency room	58.8	Self	43.1	Self	41.0
Self	13.5	Health service physicians	26.8	Health service physicians	21.7
Tactical officers (company commanding officers	13.5	Personnel deans and counselors	5.5	Other students	13.9
Student counseling service	11.8	Academic deans and faculty	5.1	Parents	<5.0
Other	2.4	Another student	4.6	Former or current patients	<5.0
		Outside physician	4.5	Residence hall counselors	<5.0

*Percentages do not total 100 percent because only the most common referral sources are listed.

casionally, 100 to 120 cadets were seen in a single day.

As mentioned earlier, the first two months of each academic year are a period of great stress for new cadets. The purpose of this early training is to assimilate new students into the culture and traditions of the Academy.[3] The main stresses are the loss of previous status, autonomy, and individuality; the rigorous physical and military training; the separation from family and familiar peer groups; and the disciplinary system. This process is similar to basic training (12).

In addition to the high resignation rate among cadets during this time—3.5 percent to 9.5 percent of the entering class—other stresses are reflected in Mental Hygiene Consultation Service statistics. During the first two months of the 1970–1971 year, the mental hygiene unit saw 31 percent of all cadets interviewed for psychiatric reasons during the year, 33 percent of all the adjustment reactions, 67 percent of the psychophysiological disorders, and 73 percent of all suicide gestures that occurred during the year. In addition, 45 percent of all cadet hospitalizations associated with psychiatric difficulties occurred during this time,[4] and there were no self-referrals to the unit during that time. The rate of diagnosed personality disorders is extremely low compared to civilian mental hygiene units. In most series, the common personality diagnoses are passive-aggressive (2) or schizoid (3, 13). The preselection factor has already been mentioned and, to quote Kerns again: "For the artistic type at West Point the way is hard. The monotony and grind of military precision, and the total lack of opportunity for individual expression, are most harrowing to the sensitive, fine-grained, imaginative lads" (14, p. 274).

[3] For an excellent article on this process, see Dornbush's article "The Military Academy as an Assimilating Institution" (11).

[4] Many of the hospitalizations were initiated by other physicians, particularly internists and surgeons, who then consulted the psychiatric service when they suspected that their patients might have a psychological problem. Forty-nine of the 119 patients seen by Mental Hygiene Consultation Service personnel were either hospitalized or seen as hospitalized patients on other medical services.

Of the total number of cadets seen in the mental hygiene unit, 6.8 percent were referred for evaluations. Two cadets were seen for allegedly smoking marijuana. Neither had a psychological problem. There has been experimentation with marijuana among cadets at West Point, just as there has been at other service academies (15, 16). No one is sure of the extent of its use at West Point.

Four cadets sought help for sexual problems. Diagnoses here included premature ejaculation, impotence, and concern about homosexuality. All of this group were self-referrals. Five cadets came for advice about specific situational problems, and 11 others, who were referred for various reasons such as academic problems, did not warrant a psychiatric diagnosis. The incidence of psychosis is lower at West Point than at civilian colleges. A comparison of statistics at several mental hygiene units (3, 17–20), including West Point's, is shown in table 4.

REFERRAL SOURCES AND USAGE RATES

Table 5 shows the referral sources to the Mental Hygiene Consultation Service for the 1970–1971 year.

Only 13.5 percent of the cadets seen in the mental hygiene unit were self-referred. This figure contrasts with figures from other universities where the percentage of self-referrals ranges from 41 percent (3) to 43 percent (7). There are several factors involved. The military is still generally considered to be a conservative establishment;

TABLE 6
Cadets Seen in the Mental Hygiene Consultation Service by Class: July 1, 1970–June 30, 1971

Class	Number	Percentage of Total
Freshman	74	62.2
Sophomore	24	20.1
Junior	12	10.1
Senior	9	7.6

seeking help from others, especially psychiatrists, is not yet part of the military ethic. Cadets are concerned that a visit to the mental hygiene unit will appear on their record. Those cadets who were referred were told that the Mental Hygiene Consultation Service would have to share its impressions with the referring source. There have been no instances where confidentiality has been breached with cadets who were self-referred. Such a possibility exists, however, under the present system.

In view of these factors, it is difficult to estimate the true prevalence of psychiatric illness at West Point. The usage rate derived from *both* the Counseling Office and the Mental Hygiene Consultation Service statistics (N = 261, excluding cadets seen only for resignation interviews) is 6.9 per 1,000 per year. Although cadets, for the reasons mentioned earlier, are reluctant to come to the Mental Hygiene Consultation Service, there is also the fact that they are closely monitored. In any situation where conformity is the rule, deviation from established and traditional norms quickly attracts attention.

The greatest number of students seen in our clinic came from the first-year class. This was also found to be true in Baker and Nidorf's study at Clark University (21), but not in the studies done at the Universities of Illinois (3) and Indiana (2), which showed that more students were drawn from the upper classes. Table 6 shows the breakdown, by class, of patients seen during the 1970–1971 year.

These figures are not surprising, since the first year is the most stressful of the four at West Point. Two of the three psychiatric discharges that were recommended during the year involved first-year cadets. In recent years the attrition rate at West Point over the four-year period has been about 30 percent. Eighteen percent occurs in the first year, seven percent in the second year, three percent in the third year, and less than one percent in the fourth. Nationally, 60 percent of all students who enter college will not graduate from the institution they first enter (17).

SUMMARY

In summary, there are similarities but also important differences between student mental health at West Point and at civilian institutions. The similarities are as follows. A majority of students did not have symptoms that indicated a major psychiatric illness; many students were diagnosed as having adjustment reactions; and the average number of interviews per student was close to the national average. The usage rate at West Point is lower than the national average but is higher than at least one other large university (see table 4).

The most significant differences are the low rate of self-referrals, the high frequency of suicide gestures (but low completion rate), the high number of psychophysiological reactions, and the low prevalence of personality disorder diagnoses.

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Psychiatric Factors in Security Screening

BY LOUIS LINN, M.D.

In screening an individual for a security clearance, there are two possible categories of mental disorder: one requiring an adverse opinion and the other a favorable opinion in spite of the presence of such a disorder. In this study of 85 evaluations, symptoms not associated with acting out such as anxiety, depression, and psychosomatic disorders were rarely a basis for an adverse opinion. Nor did hospitalization, electroshock therapy, or prolonged intensive psychotherapy in themselves constitute a basis for an adverse opinion. The author points out that the psychiatric factor is but a single element in the overall determination of eligibility to have access to classified information.

FROM TIME TO TIME an employee with access to classified information of the Department of Defense commits a security lapse as a consequence of mental disorder.

In one example, an overworked and overly conscientious engineer was seized by the belief that he was about to make inappropriate disclosures. In a panic he checked into a nearby motel, left his dispatch case in a dresser drawer, locked his room behind him, and fled. Several days later, confused and amnesic, he was admitted to a municipal hospital hundreds of miles from home. In the meantime the motel owner had discovered the abandoned dispatch case and had turned it over to the FBI when he discerned the official nature of its contents.

In another instance a technician in an airplane factory became acutely psychotic and had to be hospitalized after a drinking bout in a local bar. His delusional system contained many references to classified information in a defense contract.

To forestall security lapses the Industrial Personnel Security Program was established to make final determinations of the security qualifications of individuals employed by private contractors whose work requires access to classified information of the Department of Defense and other federal agencies.

The Department of Defense directive setting forth the criteria for issuing security clearance (1) lists 21 separate items that may provide a basis for rejection. These largely involve questionable political and ideological affiliations, as well as evidence of outright seditious activity. Needless to say, these issues are not relevant to the skills of the psychiatrist. In fact, only one criterion for rejection pertains specifically to psychiatry. This criterion includes:

> Any illness, including any mental condition of a nature which in the opinion of competent medical authority may cause significant defect in the judgment or reliability of the employee, with due regard to the transient or continuing effect of the illness and the medical findings in such case (1).

It is on the basis of this explicit and sharply circumscribed medical provision that the Department of Defense enlists psychiatric consultation to help resolve two basic questions: 1) Does there exist in the subject any illness or mental condition that might cause a significant defect in his judgment or reliability, specifically with respect to his ability to safeguard classified information? and 2) If the subject is in remission at the time of the examination, what is the likelihood that he may suffer a recurrence that will impair his ability to safeguard classified information in the future?

The Department of Defense directive defines the issue even more explicitly. It assumes, in effect, the actual existence of some defect in judgment and reliability due to mental disorder. Does such a disorder also impair the subject's ability to safeguard classified information, or is the defect a limited one that will not adversely affect his ability in this regard? These questions imply that, from the viewpoint of security clearance, there are two distinct categories of mental disorder: one that calls for an adverse opinion, another that suggests acceptance for clearance in spite of the presence of mental disorder.

It is easy to conceptualize certain diagnostic entities such as a simple depressive reaction or psychosomatic symptom formation in which impairment of one's judgment, if present at all, is highly circumscribed. On the other hand, there are other individuals who are potentially dangerous from a security point of view because they are prone to irrational social interactions. Thus the Department of Defense is not concerned with diagnosis per se, with a history of hospitalization, or with the nature of previous psychiatric treatment. It is prepared to disregard these or, indeed, any psychiatric data that, in the opinion of the consultant, do not impair the subject's capacity to safeguard classified information now and in the future.

If the mental disorder in question is clearly present at the time of the evaluation, the problem is relatively simple. However, the mental condition is very often in remission at this time and as a consequence the subject

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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shows no overt psychopathology. In these instances the determination depends to a considerable degree on the reconstruction of past events, as well as on direct examination. If the request for a psychiatric examination is based on an episode of mental illness that occurred many years previously, the consultant must take into account the effects of maturation and emotional growth in assessing the likelihood of recurrence in the future and its possible nature.

Furthermore, the consultant knows that an adverse opinion may mean the loss of the subject's job and may affect his future vocational prospects. This responsibility weighs heavily on him and, understandably, may incline him to equivocate and recommend a "provisional" security clearance in certain marginal instances. However, the subject thus evaluated may be promoted at any time to a more responsible position with greater emotional pressure or to a more security-sensitive post. The problem of reevaluating such marginal subjects with each job change would be too formidable, and so the Department of Defense asks the consultant to make a definitive recommendation for or against security clearance with respect to every subject he examines.

Obviously, the clinical psychiatric problem is not a simple one, and it seemed timely to initiate a dialogue on this topic. Accordingly, a systematic analysis of our reports was undertaken to determine the way in which my efforts to fulfill the Department of Defense directive took shape. The following summary of my experiences is to help similarly involved colleagues to sharpen basic concepts, improve techniques, and share experiences with new or future consultants.

METHOD

From 1966–1971, I saw in consultation 85 selected subjects, all of whom volunteered, on Department of Defense inquiry, that they had received a psychiatric diagnosis at some earlier time. My task was to evaluate this previously made diagnosis and to decide if the associated clinical facts warranted an opinion in favor of disqualification.

The department places at the consultant's disposal a file of previous hospital and legal records, reports of prior interviews with physicians (all data are furnished with the subject's consent), and the individual's responses to the Personnel Security Questionnaire (1). Although a consultant may repeatedly interview the subject and may arrange for psychological testing, this study is almost entirely the result of single interviews and used no additional psychological data beyond those already present in the files. A total of six subjects had been previously tested.

I reviewed my consultation reports and decided on 74 items for special scrutiny in the context of a retrospective study. A coding system was devised for transposing these items to punchcards for analysis by a sorting machine. Aside from basic demographic data, I focused on the following additional items: 1) the nature and locale of previous treatment, 2) symptom inventory, 3) acting-out tendencies, 4) diagnosis, 5) evidence of falsification in previous records, 6) pathological behavior manifested to the examiner, 7) evidence of insight, 8) evidence of emotional growth, and 9) comparison of previous diagnoses with the current diagnosis.

TABLE 1
Percentage of Those Rejected by Age Groups

Age Group	Total Number	Percentage Rejected
19–29 years	46	22
30–39 years	20	30
40–49 years	14	36
50 years and older	5	40
Total	85	27

RESULTS

Of the 85 evaluations made, 23 (27 percent) resulted in adverse opinions for security clearance on psychiatric grounds (designated hereafter as "rejection"). The remaining 62 (73 percent) were judged suitable for clearance and the opinion was for acceptance.

There is a tendency for the rate of rejection to increase at older age levels, probably reflecting an unstable work history, particularly in those in their 40s and 50s who are applying for security clearance for new jobs (see table 1).

The rejection rate for men was three times that for women: 21 (30 percent) of a total of 68 men, compared with two (12 percent) of a total of 17 women. This probably reflects the greater propensity for acting out in males, as well as a greater tendency for depressive reactions in female subjects.

A history of inpatient treatment occurred in 17 (74 percent) of those rejected, compared with 37 (57 percent) of those accepted. This is not a great difference and reflects the fact that many subjects had periods of inpatient care for relatively benign disorders while serving in the military.

Of 23 subjects who manifested psychopathology (for example, inappropriate affect, thought disorders, or psychomotor abnormalities) prior to the interview, that is when they were on the telephone making an appointment, in the waiting room, etc., 14 were rejected and nine were accepted.

Of all of the subjects who were rated rejected, 16 (70 percent) showed overt abnormalities in mental status at the time of examination, compared with 14 (20 percent) of those who were rated accepted. (See table 2.)

One subject among those rejected displayed assaultiveness and fire setting. This was not encountered among those accepted.

Acting-out behavior was seen among 21 (91 percent) of those rejected and 27 (43 percent) of those accepted. Of the 23 rejected, ten were diagnosed as schizophrenic,

TABLE 2
Overt Abnormalities of Accepted and Rejected Subjects

Abnormality	Accepted		Rejected	
	Number	Percent	Number	Percent
Delusions	3	5	12	52
Sexual deviation	5	8	6	26
Alcoholism	9	14	14	61
Other addiction	1	1	2	9
Police record	4	6	5	21
Antisocial behavior	12	19	8	35
Serious suicide attempt	3	4	2	9
Dissociative reaction	1	1	1	4

seven had personality disorders, and five were sexual deviates. It is noteworthy that alcoholism was a primary diagnosis in only one individual who was rejected, even though a history of alcohol abuse was present in 14 rejectees. Of the four subjects who falsified information on the Personnel Security Questionnaire, three were rated as rejected. The one who was accepted was an emotionally immature 20-year-old man who, as an extenuating circumstance, showed evidence of emotional growth in his recent life history.

In ten cases the information obtained from the subject during the office interview did not correspond to the information in the subject's files. In each case the subject claimed amnesia for the evidence in question; nine (90 percent) of these ten were rejected and one (one percent) was accepted.

In discussing a previous episode of mental disorder, 17 subjects evinced no insight concerning the nature of that illness; 13 (60 percent) of these were rated rejected and four (six percent) were rated accepted. Because the episode of mental disorder in question occasionally preceded my performing the psychiatric examination by several years, an attempt was made to estimate evidence of emotional growth, i.e., improvement in the quality of object relationships in the interim period with respect to: 1) family, 2) work, 3) social life, and 4) life in the community. When present, such evidence of growth and maturation weighed significantly in the examiner's recommendation for clearance. Those accepted scored positively for improvement as follows: 90, 80, 70, and 60 percent, respectively for each of the foregoing areas; by contrast, those rejected scored positively as 30, 30, 4, and 8 percent, respectively, for each of the categories.

This study provided a unique opportunity for a long-term follow-up of individuals who had suffered episodes of mental illness, some of considerable severity, earlier in life. It was impressive to observe how often subjects had been able to recover from acute episodes and to continue the process of maturation and emotional growth. The breakdown had frequently occurred during a period of chronological immaturity, such as during adolescence or early adulthood. Psychiatric treatment that enabled the individual to achieve constructive insights and changes in his life circumstances such as further education, a stable job situation, a congenial marriage, and a benign social setting counted heavily toward a positive opinion despite a history of previous severe psychopathology.

In 21 cases in which individuals had been previously rejected my diagnoses agreed with those previously noted in the file. On the other hand, there were 18 cases of individuals who had previously been accepted in which the initial diagnosis was changed. A retrospective evaluation of this group suggested revision to a more benign diagnosis. For example, certain subjects who were clearly not psychotic at the time of my evaluation had a history of emotional disorder limited to the military and diagnosed as schizophrenia at that time. A reconsideration of the facts and the subsequent clinical course suggested changing this diagnosis to adjustment reaction of adult life to reflect the consultant's opinion that the mental disorder in question was relatively benign and that any associated judgment impairment was probably not significant from a security point of view.

In more general terms, subjects in whom the preceding episode of mental disorder had been limited to clear-cut evidence of exceptional environmental stress were more likely to be among those recommended for clearance. While this phenomenon was observed particularly among subjects whose illness was limited to the military, it was also observed in others who were, for example, undergoing marital separation, long intervals of working overtime, or serious physical illness in close family members.

Many subjects had a history of severe depressive episodes necessitating hospitalization and electroshock therapy or anxiety states or psychosomatic disorders requiring medication and psychotherapy. In each of these instances the psychiatric history was not considered disqualifying. On the contrary, evidences of emotional growth as a consequence of successful treatment were in at least a few cases a basis for recommending clearance in spite of serious psychopathology in the past.

However, psychopathology was regarded as a potential source of danger from a security clearance point of view if it was associated with specific abnormal behavior patterns impinging on society at large. For example, any behavior leading to public disturbance with legal entanglements and publicity as a consequence of delusions, hallucinations, or compulsive deviant sexual behavior was regarded as disqualifying.

Educational background and job skills were represented at all levels without significant trends toward favorable or adverse opinions. A history of vocational instability occurred in 13 (60 percent) of those rejected and in one (one percent) of those accepted.

APPEALS PROCEDURE

I participated in several hearings initiated by subjects to review an adverse decision concerning security clearance and was impressed by the respect and fairness the Department of Defense showed the subject during the hearings and particularly by the opportunities for appeal.

The consultant's role is a purely advisory one. If he recommends clearance, his opinion is rarely questioned, particularly if his rationale is clearly spelled out. On the other hand, in the event that the consultant's opinion is adverse and the subject is rejected for security clearance, the subject is notified that he may contest this decision. Should he choose to do so, he can be represented by counsel, and the entire matter is intensively scrutinized before a hearing examiner who conducts a hearing in the Department of Defense local field board office, where the consultant is required to testify on the nature of his findings. In giving testimony the consultant presents his evaluation and must defend it under cross-examination in much the same manner as in a court of law. Any determination by a hearing examiner may be appealed to the Appeal Board in the Pentagon. Notwithstanding the basic fairness of the procedure, it should be pointed out that the Department of Defense directive relating to mental disorder expressly calls for the opinion of "competent medical authority." It would seem consistent, therefore, to include appropriate medical consultation in the appeals procedure as well.

The Department of Defense relies almost exclusively on civilian consultants for its industrial defense contract clearances not only because this provides the largest possible pool of senior clinicians but also because, as independent practitioners, their decisions are made presumably with the greatest possible objectivity and on the basis of the same clinical judgments that prevail in private practice.

CONFIDENTIALITY

As to the issue of confidentiality, inasmuch as the consultant is retained by the Department of Defense he must submit his findings to that agency (2). The subject has this carefully explained to him at the start of the evaluation interview. Thus the subject participates in this procedure voluntarily. He does so because he wishes to work at a specific job requiring security clearance. In no way does this inquiry impugn his loyalty or his right to work in any other setting. Naturally, the consultant will protect the subject's disclosures in all other respects as with any person whom he sees professionally. Although the issue of national security is specifically involved, the principle at stake in these consultations is no different from that involved in many related situations. For example, a physician in an induction station may have to disqualify an individual on the basis of his findings no matter how eager the recruit may be to serve in the military. Or a physician may have to disqualify a highly deserving applicant for an insurance policy if his physical condition so indicates. In each of these situations the physician makes appropriate disclosures to the agency for which he is serving as consultant, with the knowledge and consent of the subject. Any other arrangement is unimaginable. Thus the issue of confidentiality is not unique or even unusual in this program and must, in any case, be distinguished from the situation that prevails in a therapeutic relationship between the physician and his patient.

PREDOMINANCE OF NONPSYCHIATRIC FACTORS

Finally, it is well to recall that the psychiatric basis for disqualification is only one of 21 items. Psychiatric opinions for disqualification have been essentially preventive in nature, that is, none of the subjects examined had ever committed a security breach. A retrospective study of individuals actually guilty of a security lapse from any cause would not only be informative but could place this entire process on a more scientific basis. It is my speculation that the majority of these lapses would involve individuals without overt mental illness and that the psychiatric factor would constitute at most a minor element in the overall picture compared to ideologic and political considerations.

SUMMARY AND CONCLUSIONS

There are two distinct categories of mental disorder from the point of view of security clearance: one that calls for an adverse opinion vis-à-vis security clearance and another in which the opinion for clearance is favorable in spite of mental disorder.

In this study 85 subjects requiring security clearance for access to classified information were examined because of a history of previous psychopathology. In 62 (73 percent) of the cases the opinion regarding clearance was favorable; in 23 (27 percent) the opinion was adverse.

Of those rejected, 21 (90 percent) showed a tendency to act out, that is, a tendency to translate pathological thoughts and feelings into behavioral terms. Other factors associated with a high percentage of rejection were age (highest in the 40s and 50s), sex (higher in men), falsification during the preliminary security investigation, job instability, and psychopathology manifested during this interviewer's examination. Diagnostically, schizophrenia, personality disorder, and sexual deviation were present in 20 of the 21 who were rejected. Although alcoholism was a primary diagnosis in only one instance, alcohol abuse was present in 14 (60 percent) of those who were refused a security clearance.

Symptoms *not* associated with acting out, such as anxiety, depression, and psychosomatic disorders, were rarely a basis for an adverse opinion. Hospitalization, electroshock therapy, or prolonged intensive psychotherapy did not, in themselves, constitute a basis for an adverse opinion.

This study provided a longitudinal view of many subjects. Evidence of emotional growth, with or without psychiatric help, counted heavily toward a favorable opinion despite a history of severe psychopathology in a few instances.

Regulations governing the rights of individuals under-

going evaluation seem to be administered with fairness and respect.

The psychiatric factor constitutes at most a single element in the overall problem of determining eligibility for security clearance and is probably a minor one in comparison with political and ideological considerations.

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Answers to Questions of the Month

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"Credentials Consciousness": Stimulus for Continuing Education and Peer Review in Psychiatry

BY DONALD H. NAFTULIN, M.D.

The author surveys various issues related to continuing education in psychiatry, including the delineation of "credentialing" as a stimulus to the kind of quality control that the health care system seems to be moving toward. He considers the patient-management approach to identifying professional competence the most effective means of implementing continuing education; this approach is relevant to peer review and effective delivery of mental health services.

CONTINUING EDUCATION in the health sciences may well be a euphemism for peer review and quality control of health care. Those who view this as an overstatement might consider the words of Heinz R. Kuehn, administrative associate of the American College of Surgeons: "Peer review has become one of the most effective methods of educating the physician and reviewing the quality of medical care" (1). Similarly, the Pennsylvania Medical Society's "Guidelines for Peer Review Activity" (2) recommends that the chairman of a departmental audit committee be one who "understands the educational potential for medical audit and who wishes to see it work in this [educational] way."

It is likely that many more than the current four states (Arizona, Ohio, Oregon, and Pennsylvania) will soon require demonstrable continuing education as a prerequisite for sustained medical society membership. And it is more than likely that the legislative proposal to make Medicaid payment to physicians contingent on demonstrable continuing education, although it has been defeated in the past, will be passed in future sessions of Congress (3). Comprehensive Health Planning monies, when funded, are partially earmarked for continuing education, and health maintenance organization (HMO) management training grants have been extended to encourage physician "trainees," a form of continuing education in this innovative concept of health care delivery (4).

The American Medical Association has mounted a volunteer program of continuing education accreditation for its members—but with limited success. Until New Mexico mandated continuing education accreditation as a condition for physician relicensure,[1] it was uncertain how concerned health professionals were about mandatory continuing education programs (5). The American Psychiatric Association, through its Office of Continuing Education, was among the first organized medical specialty groups to develop a self-assessment program to enhance physician knowledge and, it is hoped, skills (6).

On November 15, 1971, Governor Ronald Reagan of California signed into law Assembly Bill 449, proposed by Assemblyman Gordon Duffy, establishing a Council on Continuing Education for the Health Occupations; currently the measure is applicable only to registered and licensed vocational nurses (7). In essence, the law provides that the council establish standards for continuing education as a prerequisite for continued licensure in each of the fields it covers. It is unknown when the state legislature will amend the law to include other health professionals, but the trend is clear.

All these events are bringing continuing education and peer review much closer together. Organized medicine, and certainly organized psychiatry, will be confronted with the task of developing mandatory continuing education programs that are meaningful not just to the perceived needs of their members but the patient population those members serve. This is no easy task for any group, but perhaps it is especially difficult for psychiatry. Psychiatry's job is complicated not only by a lack of specificity in methods and outcome measures but also by the poor correlation between the numerous substantive advances in the sciences contributing to psychiatry and the day-to-day application of such contributions to patient care (8, p. 8). Phrased differently, one can ask whether the psychiatrist practitioner is sufficiently challenged by perplexing clinical problems and, if so, whether he feels that the impact of the medical information explosion can contribute to his therapeutic skills.

RELEVANCE OF SKILLS TO PSYCHIATRISTS' ACTIVITIES

When 1,600 psychiatrists in the southwest were sur-

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This work was supported in part by Public Health Service grant MH-10886 from the National Institute of Mental Health.

The author would like to thank Dr. George H. Wolkon for his criticism of this paper.

[1] Although it is a requirement for physician relicensure in New Mexico, continuing education is not a requirement for sustained medical society membership.

veyed as to how often they were called upon to engage in an activity for which they felt ill prepared, fewer than two percent of the 1,062 respondents reported they were ever faced with such a dilemma (9). One can try to explain this low percentage in several ways. The first and most obvious is to question the reliability of the survey or the sincerity of the respondents. The most commendable (but absurd) explanation would be that the respondents had developed their clinical skills so well that they were rarely challenged by clinical situations in psychiatry (10). Another explanation might be that the predictability with which emotional problems are subject to amelioration is not necessarily determined within the context of clinical skill (11, 12).

Still another possible explanation is that perceived skills of subspecialty psychiatrists so approximate the needs of patients who are referred to them that the psychiatrist respondents genuinely feel well prepared to undertake most of the activities asked of them. Such a situation was found in a study of patterns of referral of recently discharged psychiatric patients to vocational rehabilitation agencies (13). Hospitals referred primarily those patients who were considered "good risks" and amenable to vocational rehabilitation, and in turn the agencies saw and accepted primarily good-risk patients who were appropriate to their programs. It is possible, albeit improbable, that psychiatrists who are rarely challenged by an activity for which they feel ill prepared are seeing primarily those patients who are good risks and amenable to the psychiatrists' specific forms of treatment. And finally, whatever constitutes clinical skill in psychiatry might be of little relevance to the types of problems psychiatrists are asked to solve in numerous other areas of professional responsibility (8, p. 61). For example, a psychiatrist with a specific set of psychotherapeutic skills might conceivably find these of little or no value if he is the administrator of a community mental health center.

LACK OF EDUCATIONAL MODELS FOR SKILL DEVELOPMENT IN PSYCHIATRY

Medicine has institutionalized the belief that a clinical background is fundamental to any kind of medical activity, including research and administration. Psychiatry is no exception to this belief. But it is conceivable that skills in psychotherapy may not lend themselves to the skills needed (to stay with the example cited) for administering a community mental health center. If such is the case, can psychiatrists build into their educational models a timetable of anticipated skill development levels, or will the increasingly free choice in residency training programs allow the resident to cultivate that which he does best or values most at the expense of other skills, including clinical ones?

If, for example, a resident who has spent his first year in inpatient psychiatry and his second in outpatient psychiatry elects to spend a year in biochemical research, one cannot predict the extent to which his third-year experience might detract from his clinical skills. But it is conceivable that his peer-perceived level of clinical skills may be less than adequate as his skills in biochemical research increase. On which skill and by which peer group should he be reviewed? And if by more than one group, can the American Board of Psychiatry and Neurology (ABPN) anticipate how different psychiatrists with different sets of skills might influence the certification process? Or should the board examine for different skills at different points in the resident's education? And if so, what designated areas of psychiatric competence should be expected of the candidate, say at the end of his first year of residency, completion of residency, and after two years in his area of interest?

SKILL DEVELOPMENT AND CREDENTIALING IN OTHER SPECIALTIES

At least two other medical specialty boards have designated specific areas of competence, demonstrated through specialty board examination performance, as a minimal standard of certification in that specialty. A long-term analysis of skills contributing to successful achievement in board examinations in the field of orthopedics has been initiated to help determine which skills are to be attained by a specific time within the education (residency and postresidency) of the specialist (14). However, orthopedics is essentially "task oriented" and thus lends itself more readily than psychiatry to developing standards and guidelines specifying the subject content and skills necessary for successful completion of those tasks.

The American Board of Internal Medicine (ABIM) recognizes that "some candidates will have developed sufficient competence in the broad field of internal medicine that they can appropriately undertake the examination after devoting to general medicine the acceptable minimum period of two of the three required years of training . . ." (15). As of June 1972, the ABIM no longer uses its written qualifying exam (comparable to the written Part I of the ABPN exam) as a prerequisite to the oral certifying exam for candidates completing training after November 1971. Instead, the ABIM will require a more thorough description and evaluation of the candidate's graduate education performance by his residency program director. If the board finds the candidate's residency evaluation satisfactory, the candidate may then take the written exam, successful completion of which will certify him in general internal medicine. Presumably, a high correlation between success on the written qualifying exam and subsequent success on the oral certifying exam encouraged the ABIM to experiment with this change. The change has initiated at least two trends within graduate education in internal medicine that are relevant to the theme of this paper.

Successful completion of the written certifying examination encourages the candidate to apply for an increased choice of written and oral subspecialty examinations if he meets the training qualifications for the

subspecialty. In addition, the ABIM's greater reliance on residency program directors for evaluation of candidates will necessitate visiting programs at intervals to examine the efficacy of the internal review mechanism (16). One can hope that such visits will aid in developing better guidelines for subject content and skill development in the education of the internist. Whether graduate education programs in psychiatry can agree on what subject content and skill development a psychiatric resident should have mastered by a specific time in his education is currently unanswered. But such questions must be raised if psychiatry is to establish effective peer review standards.

If the low correlation between physicians' cognitive knowledge, as exhibited through test procedures, and task fulfillment, as observed in their clinical performance, is as great as suggested (17, 18), peer review standards in a specialty as poorly defined in performance levels as psychiatry risk severe ambiguity. It is highly improbable that psychiatry can convincingly justify its inclusion in any broad health insurance scheme unless it can more clearly define its function and performance levels. If these are defined, the task of maintaining the performance levels will fall largely to the organization responsible for "credentialing."

Psychiatrists' Interest in Board Review

In the survey (9) cited earlier, little surprise was evoked when 60 percent of psychiatrist respondents eligible to take ABPN examinations chose a board preparation course as a perceived educational need. Other high-interest areas were adolescent, forensic, and community psychiatry and psychosomatic medicine—again not unexpected findings. But the relatively low interest of the respondents in clinical examples of psychiatric syndromes, recent advances in clinical medicine, clinical assessment, organic therapies, and nosological problems was perplexing, since it was believed that these topics represented areas of clinical relevance to psychiatry.

Some reasons may be offered for this low response. It is possible that the topics did not appear clinically relevant to the respondents' practice needs. For example, if a respondent is primarily engaged in psychotherapy, his need for clinical examples of psychiatric syndromes, advances in clinical medicine, and nosological problems may be minimal. However, it seems reasonable that clinical assessment and organic therapies might be of some relevance to such a psychiatrist's clinical practice. On the other hand, it is possible that the respondents' interests were not necessarily correlated with topics that were more applicable to their clinical practice but rather ones that satisfied "credentials consciousness" (19).

CONTINUING EDUCATION AND "CREDENTIALING"

Of 391 psychiatrist respondents eligible to take ABPN examinations, 234 (60 percent) chose a board review course as a specific continuing education interest area. Of that number, a total of 127 have actually taken the course at the University of Southern California (USC) over the four years it has been offered. Only five of those who completed the course said they were not planning to take board examinations. When two others elected to repeat the course after they had delayed their examinations, it was with the goal of being better prepared for the day of reckoning. Only one board-certified psychiatrist who enrolled in and completed the course said he did so because he was interested in a good review of psychiatry and related fields. It is unlikely that these data reflect a consuming interest in clinically relevant material as much as they reflect a concern with being sufficiently prepared to withstand the credentialing process.

How well the course provided a vehicle for the achievement of that goal is not adequately known, since the ABPN does not release statistical data about candidate performance. Nor does the board release "condition" or "fail" statistics in *The American Journal of Psychiatry* issues listing candidates who passed. But the respondents' opinions of how well the course contributed to their goals indicated that they perceived it as the main and most significant source of board preparation as well as an effective educational experience. It is equivocal whether the course provides an incentive to participate in future USC continuing education programs, since 35 percent of the enrollees had participated in previous USC continuing education programs, but 43 percent of enrollees in the intensive review course who had not previously attended USC continuing education programs did so after completing the intensive review course.

More crucial to the theme of this paper, however, is whether intensive review provides an educational experience that broadens the psychiatrist's knowledge of his field and enhances his clinical skills. Data gathered from testing participants on the material taught as well as the simulated oral examination at the end of the review indicated that the psychiatrist's cognitive knowledge of the field was very likely enhanced. But it is highly equivocal whether clinical skills, if definable and then measurable, are significantly altered by this learner-influenced board review course.

For example, pre- and postcourse simulated oral examination scores demonstrated no average increase in clinical skills; those entering the course with an above-average score in clinical psychiatry actually *decreased* their clinical psychiatry scores after the course. Those scoring below the mean before the course increased their scores after the course. Explanations for this have been reported elsewhere (20). More significantly, the results call into question the extent to which a candidate may, intentionally or not, overemphasize the didactic aspects of his specialty at the expense of an area in which he has already demonstrated above-average competence and on which the oral examination should concentrate, namely, interviewing skills.

Even more perplexing is the observation that those initial above-mean scorers who lowered their clinical psychiatry scores at the end of the course had increased their scores in basic neurology, basic psychiatry, and clinical neurology. This calls into question the relationship between clinical and basic psychiatry and also raises the

practical problems of what one tests for in credentialing the clinically competent psychiatrist. Presumably such a psychiatrist should be able to utilize flexible interviewing skills with an extensive but finite variety of patients and support a diagnosis and treatment plan based on his observations as well as his experience and knowledge of the literature. Such a clinician would certainly be considered competent, but the extent to which basic knowledge of psychiatry and neurology correlate with that competence (or more importantly, patient care) is still to be determined. For example, 83 percent of the psychiatrists in the intensive review course felt the neurology portion of the review was relevant to material needed for board examination, but 65 percent felt such material would not benefit their patients.

Thus, at a time when we are being asked to identify continuing education needs and interests, it appears that a very motivated majority of board-eligible psychiatrists define their needs in terms of what may credential them rather than what may possibly enhance clinical skills, therapeutic relevance, and patient care. This observation forces one to ask how incentives for quality control and effective peer review can be implemented within a continuing education area of high interest such as board review.

EDUCATION, PROFESSIONAL ROLE, AND COMPETENCE

If one concedes that the traditional peer review process is probably more vulnerable to "cronyism" and professional patronization than is the elitist cadre of board examiners who test for professional competence, it is likely that the board examination process can serve as a more effective peer review instrument. But review for what? Certainly completion of a basic science review in preparation for a multiple-choice test would hardly be a demonstration of the psychiatrist's ability to deliver effective mental health care. An adequate review of the current literature might provide the candidate with the comfort and illusion that he knows his field and therefore demonstrates professional competence. It is even questionable whether a professionally incompetent psychiatrist who knows basic science and literature is potentially less harmful to the patient than the incompetent one whose shortcomings are more demonstrable. Specifically, such shortcomings might be more evident in the area of patient management.

To the psychotherapist whose practice consists of long-term, insight-oriented therapy with outpatients, the concept of patient management might be viewed as pejorative or at best manipulative. The particular practice needs of such a psychiatrist might not lend themselves readily to continuing education through greater exposure to patient-management problems. Rather, continuing education programs and peer review methods that would be most effective for him might involve comparative psychotherapy experiences in conference or videotape form, with specific questions derived from such learning formats.

The tailoring of educational programs to the perceived needs of psychiatrists redirects our attention to the issue of what a psychiatrist does. This is not easily answered. I have already suggested what a clinically competent psychiatrist should be able to demonstrate in a credentialing examination. But what about the psychiatrist who has demonstrated such clinical competence, is credentialed accordingly, and has moved into, say, community mental health or inpatient psychiatry? Presumably his interest (combined with many other factors) guides his specialty choice. However, is that interest, along with the other factors, sufficient to motivate his continuing self-assessment of the knowledge and skills needed for competence in that area? Does his being a credentialed, clinically competent psychiatrist qualify him to direct a community mental health center or an inpatient service? If not, what skills should we expect of such a psychiatrist in order for him to fulfill these tasks? Could the work of the Committee on Certification in Administrative Psychiatry be expanded to allow for the clearer definition of such skills? More importantly, what obligation does organized psychiatry have to the patients seen in a mental health center or inpatient service vis-à-vis establishing criteria for competence in these still unofficial subspecialties? In the absence of adequately demonstrated continuing education relevant to patient care in a particular subspecialty, organized psychiatry might opt for more effective standards of peer review even to the point of recredentialing the board-certified psychiatrist in his subspecialty.

PATIENT-MANAGEMENT PROBLEMS IN CONTINUING EDUCATION AND PEER REVIEW

For those psychiatrists who will be practicing increasingly in the public sector and thus must be responsive to health legislation guidelines and to association with other health professionals, and who must be equipped for short-term, directive forms of mental health services, the patient-management approach toward continuing education seems appropriate. Such efforts can be constructed so as to include not just simulations relevant to patient care but also an assessment of the respondent's knowledge of legislation, program development, and community organization. The emphasis of each subspecialty group can be built around a variety of examples of patient-management problems; but the questions as well as the knowledge and skills brought to the problems would vary with the subspecialty examination.

Four related phenomena in psychiatry support greater emphasis on patient-management approaches in continuing education and peer review. The first involves the American Board of Psychiatry and Neurology itself. In 1966 the ABPN converted its format from a combined written/oral examination to a screening written examination devoted largely to basic sciences and a final oral examination in basic and clinical psychiatry and neurology (21). In 1970 the format changed again: basic neurology was made part of the written examination and was excluded from the clinical neurology portion of the oral

exam except as it related to clinical problems. Although the change occurred for many reasons, its effect may enhance the patient-management aspect of the oral board examination process because more time is provided to evaluate candidates' performance in the patient interview, and the anxiety concerning the oral basic neurology examination felt by psychiatrists not accustomed to using such information may be reduced. If the latter occurs, more psychic energy would be available for effective clinical performance. Second, the APA Office of Continuing Education has reduced the number of administrative psychiatry problems and has increased the number of patient-management problems in its self-assessment test (22). Third, the hospital record-keeping system developed by Weed (23) incorporates a patient-management approach to problem-oriented records. Studies of the Weed system suggest that, in addition to more effective record keeping, it provides a potential format for effective peer review and continuing education in medicine generally (24, 25). The application of the Weed system to psychiatric record keeping is also eliciting some favorable expectations (26, 27). But the obstacles may be even more formidable than for the rest of medicine because of the numerous and complex functions that psychiatry carries out. Patient-management problems, as part of the written and oral portions of the ABPN examination, may force a better definition of these functions and a reevaluation of psychiatry's role in the extension of health care in this country.

CONCLUSIONS

Voluntary continuing education programs have been endorsed by organized medicine; self-assessment tests have been offered in the hope of developing an effective alternative to mandatory continuing education. Medical skills—and specifically, psychiatric skills—will be under closer scrutiny and in need of more specific identification. When asked to define their continuing education interests, an impressive number of psychiatrists indicated board review as a primary one. I suggest that board review courses and the ABPN examination itself be considered as a more effective vehicle for continuing education and peer review. I consider the patient-management approach to identifying professional competence among psychiatrists a superior means of implementing the kind of continuing education that is relevant to effective peer review and the delivery of mental health services.

One can hope that the ABPN will experiment with greater emphasis on such problems and share the results of their evaluation in an effort to establish more effective guidelines to assess competence in carrying out the numerous functions of the psychiatrist. In the absence of extensive continuing education in psychiatry and the cooperation of the ABPN in assessing the relevance of certification as it relates to effective patient care, organized psychiatry may be forced to consider periodic mandatory recertification in an effort to assure adequacy of peer review.

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Psychiatry Residents as College Teachers: An Evaluation of a Training for Teaching Program

BY ALAN M. LAZERSON, M.D.

Questionnaire evaluation of a recently developed training experience within an overall program designed to prepare psychiatry residents to become better teachers revealed that the project was popular with students, resident teachers, and the college administration. Of the 60 students polled, over 80 percent rated their instructor and their course as above average or better. Eighty-five percent of the responding students felt that they had learned a great deal, and the residents reported that it was also an excellent learning experience for them.

OVER THE PAST SIX YEARS the Division of Psychiatry of Boston University School of Medicine, in conjunction with the Boston University School of Education, has developed a Training for Teaching Program designed to prepare residents in psychiatry to become better teachers. This program was initiated not only to meet a long-felt need, but also as a result of an increasing demand for psychiatrists to teach in professional, university, and community settings, a demand propelled by the force of the community mental health movement. The program is rare in professional education in that mastery of content alone is not considered to be sufficient background for teaching. Rather, it is felt that teaching experience under supervision, along with a systematic consideration of the principles of teaching and learning, is vital in the development of the psychiatrist as a teacher.

This report describes a recently developed training experience within the overall program and highlights the results of one semester. As part of a graduated series of teaching opportunities available each year, it offers an unusual chance for a supervised teaching experience with a variety of students at Metropolitan College, the evening division of Boston University.

It should be stressed that this experience in the Training for Teaching Program is the middle step in a program that spans the three years of training. It builds on a brief, intensive first-year experience in teaching about adolescence to undergraduate education majors. The third year offers additional diversity and may include additional supervised teaching at Metropolitan College, the School of Medicine, or a community mental health facility. Other activities include regular conferences on typical teaching issues or problems. From the beginning, all residents have the advantage of being able to speak from their own teaching experience, and this increases their active participation.

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This work was supported by Public Health Service grant MH-10509 from the National Institute of Mental Health.

The author wishes to express his appreciation to Drs. William Gurnack, Stephen Howard, Peter Musliner, and Robert Ziegler not only for their assistance in compiling the data but also for their dedication to the teaching experience that this evaluation reflects.

THE METROPOLITAN COLLEGE TRAINING EXPERIENCE

Setting

The courses are developed and taught by the residents in Metropolitan College classrooms as full-credit courses that are elected by regularly enrolled students. Classes meet weekly in the evening and therefore do not interfere with the residents' other training responsibilities.

To provide an administrative structure for the program that in itself would contribute to training in teaching, an academic department of Mental Health Studies was established by an arrangement between the college and the Division of Psychiatry. The residents make up the faculty of the department, and I am its coordinator.

Students

The students at Metropolitan College represent a heterogeneous population. Many are enrolled in other colleges. Some are considerably older than the average student, and some already hold degrees. Eighty-two percent of the 60 students in this study were in full- or part-time employment. The residents thus have a unique opportunity to teach a diverse group that more closely approximates the mental health groups that they may eventually be teaching than a typical undergraduate or medical student population.

During our two-year experience at Metropolitan College, nine residents have offered 18 full-semester courses to approximately 350 students.

Course Content

The subject matter of the course is chosen by the resident following consultation with the psychiatry faculty and the Metropolitan College administration. Typical content offered by the resident may be an area of research or clinical interest (e.g., drug use and abuse), theoretical interest (e.g., child development), or an elaboration of his adolescence course.

TABLE 1
Students' Evaluation of Instructors

Instructor	Students	Responses	One of the Best	Above Average	Below Average	Far Below Average
Resident A	31	23	10	11	2	0
Resident B	15	11	1	7	2	1
Resident C (course 1)	25	12	10	2	0	0
Resident C (course 2)	20	14	10	2	2	0
Total	91	60	31	22	6	1

Teaching Under Supervision

Early in the project we observed that activity in learning was a necessity; talking about teaching was not the same as doing it. Residents and faculty decided that resident-teaching under supervision offered the best way to achieve the aims of the program.

The resident is therefore observed with varying frequency in his teaching by the faculty of the School of Education, faculty psychiatrists, and his peer teachers. After his class he is provided with feedback about his teaching style and is questioned about his goals and his methods of evaluation of student learning.

METHODS OF EVALUATION

Outline

The overall evaluation of this teaching experience included data of various types from a variety of sources: 1) evaluation of the resident instructors by the Metropolitan College students (from a questionnaire), 2) evaluation of the courses by the Metropolitan College students (from two questionnaires), 3) evaluation of their own learning in the course by the Metropolitan College students (questionnaire), 4) evaluation of their own learning-to-teach experience by the residents (through informal discussion and a subjective questionnaire), 5) evaluation of the overall results by the Metropolitan College administration, 6) impressions of the psychiatry faculty in the program (from observation and discussion), and 7) impressions of the faculty from the School of Education (from observation and discussion).

We recognize that this evaluation lacks not only control subjects, such as residents who did not participate in the program, but also longitudinal before-and-after comparisons of each resident as he moved through each phase of the program.

Description

At the end of the first semester of the 1971–1972 year the college evaluated, through an anonymous student questionnaire, 85 percent of its total course offerings. Four of our five courses and three of the four instructors were included, by random selection, in this evaluation.

Of 62 items used, several seemed especially pertinent to this evaluation. One of the questions provided an overall evaluation of the instructor: "In comparison with all the instructors I have had, both in high school and in college, this instructor was: a) one of the best, b) above average, c) below average, d) far below average."

Favorable responses to this question (i.e., a *and* b) were added, and a "favorable" percentage of the total number of students responding to the questionnaire was computed for each department. An all-college favorable percentage was obtained. In addition, the departments were put in a rank order on the basis of this percentage.

An overall measure of the Metropolitan College students' evaluation of the course was taken from responses to another question on this questionnaire: "In comparison with all the courses I have had, both in high school and in college, this course was: a) one of the best, b) above average, c) below average, d) far below average."

A second questionnaire, which I devised primarily to determine the background and interests of the Metropolitan College students, included a question that attempted to assess the "general feeling about this course: a) pleased, b) satisfied, c) dissatisfied, d) not up to high expectations."

The residents were to distribute these to their students at the end of the course.[1] In those cases where this was not possible, the questionnaire was mailed to the students, with an expected paucity of returns. Fortunately, however, the resident whose course was not covered in the Metropolitan College questionnaire (resident D) was able to poll his students directly.

An overall assessment of the Metropolitan College students' learning was taken from a third question on the Metropolitan questionnaire: "In this course, I learned a great deal: a) definitely yes, b) yes, c) definitely no, d) no."

The residents' evaluation of their own learning-to-teach experience was obtained by both informal discussion and a six-item questionnaire that included the following questions:

1. What were your expectations about this experience?
2. In what ways did the experience fulfill or differ from your expectations?

[1] Unfortunately, for a variety of reasons not all students could be polled in person.

TABLE 2
Students' Evaluation of Courses

Course Instructor	Students	Responses	One of the Best	Above Average	Below Average	Far Below Average
Resident A	31	21	11	8	1	1
Resident B	15	10	0	7	1	2
Resident C (course 1)	25	12	9	3	0	0
Resident C (course 2)	20	14	7	5	1	1
Total	91	57	27	23	3	4

3. Give your evaluation of the response and progress of your students.
4. What suggestions have you about changes which would have made your experience more valuable?

The final three methods of evaluation are based on overall impressions and are self-explanatory.

RESULTS

The responses to the questions used to measure the students' evaluation of the instructors, courses, their feeling about the courses, and their own learning are presented in tables 1–4, respectively.

A total of 28.3 percent of all the Metropolitan students answered, "one of the best" to the question rating the instructor, and 49.8 percent responded, "above average." The total of these two responses, grouped as favorable, was therefore 78.1 percent for all the courses in the survey.

The comparable data for instructors in the Department of Mental Health Studies was 49.2 percent for "one of the best" and 34.9 percent for "above average," totaling 84.1 percent as favorable. In the rank order based on the favorable percentage, the department ranked ninth of the 22 departments included in the study.[2]

To complete the Metropolitan data, 14.7 percent of all the students rated all the instructors as "below average," 2.4 percent rated them as "far below average," and 4.6 percent did not answer. For the courses in our department the comparable responses were 9.5 percent, 1.6 percent, and 4.8 percent.

The method used for the residents' evaluation of their learning-to-teach experience makes it difficult to tabulate the responses that they gave. Several quotations, however, may illustrate:

Resident A:

> My experience in my several years of teaching at Metropolitan College under the aegis of the Training for Teaching Program has been quite positive. The actuality of teaching classes has necessitated deepening my thinking as a practitioner, both of psychiatry and of teaching, and has forced me to grapple with the very real problems and satisfactions of teaching. Instructing in the same subject for several semesters has further given me the opportunity for experimentation in didactic techniques and classroom dynamics.

Resident B:

> I expected it would be a good experience, which indeed it was. I had favorable feelings from the first [year] experience, and it was repeated this year. . . . The students were most helpful in helping me define my role as teacher, and the result was a very favorable interaction between myself and the students.

Resident C:

> I expected a group of people who were interested in learning how people worked, either for personal or intellectual reasons, and who felt that their own experiences and their experience of the literature would be mobilized to create that understanding.
>
> I was continually amazed at their capacity to reflect and make use of very varied resources to determine what was going on.

Resident D:

> My expectations were largely met through my experience teaching. . . . I found the experience valuable in that I observed, on their and my own part, both ends of the spectrum of rapport. I can't suggest any changes. I feel that what I need is merely more experience and the chance to test out my hypotheses concerning the past term by going at it again next term.

The following quotation is an excerpt from the evaluation of the overall results by the Metropolitan College administration (1).

> Now that we are approaching the end of the first year of offering the courses, we have made the following evaluation:
> 1. The quality of the teaching and the content of the courses are excellent and have lived up to our expectations in every way.
> 2. The program was very helpful toward our continuing efforts to enrich our curriculum with courses of quality and relevance to students' contemporary interests and needs. . . .
> 5. We were able to demonstrate our interest in fulfilling our

[2] These percentages are slightly different from those which would be derived from table 1, since three of the students who responded to the questionnaire did not check any answer to this question. These students are included in the Metropolitan data but not in table 1.

TABLE 3
Students' Feeling About Courses

Course Instructor	Responses	Pleased	Satisfied	Dissatisfied	Not up to High Expectations
Resident A	23	14	8	1	3
Resident B	3*	3	0	0	0
Resident C (course 1)	6*	6	0	0	0
Resident C (course 2)	2*	1	0	1	1
Resident D	17	8	8	1	6
Total	51	32	16	3	10

*By mail.

commitment to the community by offering courses of interest to professionals from various agencies in the Greater Boston area.

Needless to say, we are very supportive of the program and hope it will continue.

Along with Dr. James Skinner, former director of the program, I have had the opportunity to see each of the residents during his teaching experience. Among many aspects observed, the enthusiasm of each teacher, his interest in his students and his eagerness to have them learn, and a versatility in approach coupled with a wide variety of subject matter were always apparent. On each visit there appeared to be a learning alliance (2) between the teacher and most of his students.

The following quotation is an excerpt from the impressions of the supervisors from the School of Education (3).

> The residents' . . . classes at Metropolitan College exhibit as a group many of the sensitivities, approaches, and techniques associated with good teaching. They reveal sensitivity to the centrality of the student in the learning enterprise by involvement of students in class planning, by interspersing lecture with discussion, and by seeking and utilizing student feedback as their courses progress. . . .
>
> All in all, the residents seem to be utilizing insights acquired during their earlier experience with undergraduate students. They also reflect their psychiatric training in their interactions with students and by their sensitivity to the learning environment.

DISCUSSION

Several results of this experience may be readily identified.

Clearly apparent is the popularity of the program on the part of the residents, the students, the administration, and the program faculty. It is striking that of 60 responses from the students (table 1), over half considered their resident to be one of the best instructors they had had in high school or college, and 53 (88 percent) considered him at least above average.

While the residents as a group were rated only six percentage points above the favorable mean for the college, they were 21 percentage points above the mean for the "one of the best" rating. These data help to meet the problem introduced by the necessity for a forced choice on this questionnaire, and the validity of the results is enhanced by the multiple sources of data.

While the results of the second questionnaire (table 3) are far from complete, they at least do not contradict the data on the first questionnaire. Since the duplicated data on resident A's course is similar—22 of 23 students were "pleased" or "satisfied" with the course on questionnaire 2, as compared with 19 of 21 who rated the course as "one of the best" or "above average" on questionnaire 1 (table 2)—we may make the assumption that the data would be comparable for the others. Thus the main value of this questionnaire for an evaluation of the results is that it completes the data by including the course of the missing resident D. With 16 of 17 students (94 percent) "pleased" or "satisfied" with his course, this follows the pattern of the overall total of 88 percent responding, "one of the best" or "above average."

Students and teachers were both learning. Not only did 53 of 62 of the responding students (85 percent) feel that they had learned a great deal (table 4), but the residents reported that it was also an excellent learning experience for them.

Although it is not indicated in the data supplied, the residents also learned a great deal about their subject. Facing a situation that requires one to teach what he knows is a major stimulus to learning, and the residents found themselves independently thinking, reading, and

TABLE 4
Students' Evaluation of Whether They Learned a Great Deal

Course Instructor	Responses	Definitely Yes	Yes	Definitely No	No
Resident A	24	11	10	0	3
Resident B	11	1	7	2	1
Resident C (course 1)	13	3	10	0	0
Resident C (course 2)	14	5	6	0	3
Total	62	20	33	2	7

learning more and more about what they had chosen to teach.

Perhaps these results should not be surprising. Young psychiatrists, interested in their subject matter, trying their wings in their first major teaching venture, with support and available supervision and consultation, bring a freshness to their teaching that is contagious.

We believe that these findings would be approached in a training experience for a young professional in any discipline provided with a similar program. However, it is noteworthy that, when the project first began in 1966, a poll of similar residents indicated that had they not become physicians their occupational choice would have been teaching.

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A School for Medicine Men

BY ROBERT L. BERGMAN, M.D.

The author discusses the establishment and training program of a Navajo school for medicine men and his involvement in it. From a psychiatrist's point of view, he describes the nature of the curative ceremonies and a few of what he perceives as their effects. He also discusses his role in teaching the medicine men and trainees something about medicine and psychiatry and their reactions to these.

THIS PAPER IS AN ACCOUNT of how a Navajo community set up its own medical school and how a non-Indian psychiatrist became involved in it. In order to understand what happened one must have some acquaintance with the nature of Navajo medicine. This subject has received an enormous amount of attention from anthropologists and other behavioral scientists. I will make no attempt here to review the extensive anthropologic literature except to recommend the great works of Haile (1), Reichard (2), and Kluckhohn and associates (3–6). The psychiatric literature is less extensive. It includes the early article of Pfister (7), which seems to me to be remarkably insightful and sound in spite of having been based on very little and quite second-hand evidence. The Leightons (8) in 1941 described Navajo ceremonials beautifully and explained many of their beneficial elements. Sandner (9) reported his work with Navajo medicine men to the APA three years ago. Almost everyone agrees that the ceremonies work.

BACKGROUND

Navajo practitioners generally fall into three categories. The herbalists know a variety of medicinal plants, which are used primarily for symptomatic relief. The diagnosticians are shamans who work by inspiration. By one of several techniques, such as hand trembling, crystal gazing, or star gazing, they divine the nature and cause of an illness and make an appropriate referral to a member of the third and highest status group, the singers. The singers (I will use the terms "ceremonialist," "medicine man," and "singer" synonomously) do the only truly curative work, and it is a school to train them that I will be discussing.

Navajo nosology classes diseases by etiology; identical illnesses often have similar symptoms, but they need not. Note that psychiatric nosology is similar, e.g., depression is often characterized by insomnia, but sometimes the reverse can be true. A seriously oversimplified statement of Navajo etiology is that disease is caused by a disharmony with the universe, including the universe of other men. A singer restores this harmony by performing a ceremony proper to the case. Little or no reliance is placed on herbs or other medicines and, as is the case with psychiatry (at least from the psychoanalytic viewpoint), this absence of organic measures confers high status.

No one seems to know precisely how many ceremonies there are, but there are many. Important ones last five or nine nights and are difficult and elaborate to a degree approached among us physicians, I think, only by open heart surgery. The proper performance of a major sing requires the presence of the entire extended family and many other connections of the patient. The immediate family must feed all of these people for days. Many of the people present have important roles in the performance, such as chanting, public speaking, dancing in costume, leading group discussions, and many other prescribed activities of a more or less ritualized nature. For the singer himself the performance requires the letter-perfect performance of 50 to 100 hours of ritual chant (something approaching the recitation of the New Testament from memory), the production of several beautiful and ornate sand paintings, the recitation of the myth connected with the ceremony, and the management of a very large and difficult group process.

Non-Navajo explanations of why all this effort helps anyone tend to be rather offensive to the medicine men themselves, and *their* explanations, if they should feel like giving any, tend to be unsatisfying to us since they are based on the supernatural. The difference may not be as great as it appears, however. Traditional Navajos talk frequently in symbols: "We are glad you came from Washington to talk with us. There are many mountains between here and Washington," which translates as, "Communication with the federal government is difficult. We are glad you are making an effort to improve it." They also reject the notion that they are using figures of speech. They do not attach as much significance to the distinctions among different levels of reality as we do, and like some poets, they reject as stupid and destructive any attempt to translate their words into ordinary language. Though it seems to me that their myths and chants

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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are symbols of human social-psychological forces and events, they would regard such a statement as silly and missing the point. Nevertheless, I will make a slight attempt in that direction.

THE RITUALS

For the past six years, I have been practicing psychiatry among the Navajo people. I have often referred patients to medicine men (who in turn occasionally refer patients to me). I have also often consulted medicine men, and patients have often told me about the medicine men's traditional cures and their feelings about these cures. It seems to me, although my knowledge of the sings is very limited, that the ceremony performed is almost always symbolically appropriate to the case. Pathologically prolonged grief reactions, for example, are almost always treated with a ceremony that removes the influence of the dead from the living and turns the patient's attention back toward life. "Treatment of a dream by a dream," Pfister called it.

It seems to me that the singers and we psychiatrists are the converse of one another with regard to our attitude toward ritual. To them ritual is the main focus: What is unvaryingly their practice from one case to another is at the center of their thought. Informal interaction with the patient and his family is considered important in an informal sort of way. This kind of interaction is not what is taught explicitly but only what is taught by the by. Our ritual, which I would argue is fairly elaborate, is not taught as the central part of psychiatry; rather, the more varying interaction is taught explicitly to psychiatry residents—ritual being taught by the by. In any event the singers do manage an intricate family interaction that, I think, has several important effects: 1) the patient is assured that his family cares for him by the tremendous effort being made; 2) the prolonged and intense contact makes it inevitable that conflicts are revealed and, if things are handled skillfully, resolved; and 3) a time of moratorium and turning point are established.

At the time I first heard of the medicine-man school in 1967, I was already quite convinced of the value of Navajo medicine. Aside from the cases I had seen, I was greatly influenced by my contact with a singer named Thomas Largewhiskers. Mr. Largewhiskers, who is now 100 years old, agreed to be my consultant and to teach me a little of what he knew. I first looked him up after seeing a formerly psychotic patient who attributed her remarkable and well-documented improvement to him. At the time of our first meeting I tried to explain what I do and said that I wanted to learn from him. He replied, "I don't know what you learned from books, but the most important thing I learned from my grandfathers was that there is a part of the mind that we don't really know about and that it is that part that is most important in whether we become sick or remain well." When he told me some of his life story it impressed me that he had become interested in being a singer when, as a young man, he had had an accident and the singer who took care of him explained that it had been unconsciously determined.

Mr. Largewhiskers and many other extremely old men are still practicing very actively. There is a growing demand for their services—growing because the population is increasing and their belief in traditional medicine is continuing. The trouble is that younger people are not becoming singers. The reasons behind the lack of students are largely economic. To learn to perform even one short ceremony takes at least a year of full-time effort. To learn a major ceremony takes much longer, and many medicine men know several. Since the end of the old herding economy, almost no one can afford to give up earning a living for such a long time. At the time of starting the school for medicine men Yazzie Begay, one of its founders, said, "I have been acquainted with several medicine men who have recently died. They were not able to teach the ceremonies which they knew to their grandchildren or to anyone else. Today their sacred instruments and paraphernalia are sitting unused."

THE SCHOOL

The school is at Rough Rock, Ariz., a community near the center of the Navajo Reservation. It is part of the Rough Rock Demonstration School, the first community-controlled Indian school. The Demonstration School was started in 1965, when the Bureau of Indian Affairs (BIA) gave the buildings and equipment to a nonprofit corporation of Navajo leaders called Dine, Inc. Dine helped the Rough Rock chapter of the tribe set up and elect its own board of education (no one on the original board could speak English and all were ceremonialists) and then contracted with the board to operate an elementary boarding school. BIA contributed funds that would have been equal to the budget of such a school if they had been operating it; funds also came from the Office of Economic Opportunity (OEO) and other sources. Soon after the school began operations in 1966, the people became convinced that their ideas really were taken seriously in its daily workings, and several local people suggested setting up the medicine-man school to the board. It was pointed out at a board meeting that white people have medical schools and give students scholarships to attend them and that what was needed most on the reservation were new medicine men. Therefore they felt Rough Rock should set up a school for singers and provide scholarships.

The idea was taken up enthusiastically by the board, and the details were worked out over the course of the next year. It was decided to alter the traditional method of teaching and learning sings as little as possible. (The old way is by apprenticeship and takes place in the teacher's home.) It was also decided that each medicine man would teach two apprentices of his own selection; that is, application for admission to the school would be made by trios consisting of a medicine man and two trainees. The school board would select among them on the basis of the medicine man's reputation, the trainees'

apparent ability, and the importance of and threat of extinction to the ceremony that was proposed to be taught. The medicine men were to be paid a very modest salary and the trainees considerably less for their subsistence.

OBTAINING FUNDS

Ever since the Demonstration School started, I had been going there once a month or more to consult with the guidance counselor and teachers. At one time the school administration, at the direction of the board, was preparing a project proposal in an attempt to obtain funds; I was asked to attend a meeting about the project, and here my support for the proposal was enlisted. This was the first of several project discussions in which I took part, and ultimately the board kindly included me in the proposal. It was decided that I should meet regularly with the trainees to discuss non-Navajo medicine, particularly psychiatry. I strongly suspect that my inclusion was a move to make the project look more reasonable to funding agencies.

I flatter myself that from time to time my colleagues in the school and the trainees have been glad to have me around, but I am sure that I have gained much more from this than they have. Before the project could materialize, however, we had to obtain funds.

The first proposal was made to OEO, which turned it down. The second proposal went to the Training and Special Projects Branch of the National Institute of Mental Health (NIMH). This one was accepted, although not, I suspect, without some trepidation. At the time of the site visit by NIMH it became apparent how many mountains there really were between Rough Rock and Bethesda, Md. First of all, the weather became very bad and the site visitors felt they were stranded in Albuquerque, which is 250 miles away from Rough Rock. Luckily the school board was able to go to Albuquerque, so we had a meeting. Two incidents seemed to me to epitomize the meeting. The first was a question from the visitors: "How can a project that supports the continuance of superstition promote mental health?" The reaction of the ceremonialist school board members was more restrained than I had expected. They answered at length, and I added my endorsement. The visitors seemed satisfied. Later one of them, in leafing through the documents, said, "The project director is to be full-time, and the salary listed here is $5000. Can that possibly be right?" When that question had been translated, Mr. John Dick, the director in question, who was a medicine man and a former school board member, asked anxiously, "Is it too much?" I am very grateful that the project was funded, and I know that the board is also appreciative.

THE TRAINING PROGRAM

The work began in September 1969 and is still continuing. There are six medicine men and 12 trainees. Most of the original trainees are still in the program. One of the faculty members died during the first year and was replaced. The ceremonies being taught so far have been one and two nights in length, and almost all of the trainees have completed learning them. Soon they will be performing them for the first time. They will then go on to major ceremonies. Although the lessons (excluding the ones I teach) are conducted at various homes scattered over considerable territory in which there are no paved roads, Mr. Dick as director maintains close supervision. He travels to each home and watches over the teaching and its results. As the trainees have progressed, he and other medicine men have tested them. My only criticism has been that Mr. Dick's supervision seems rather harsh at times. He has demanded continuous effort and has been very hard on some people whom he surprised when he thought they should be working and they weren't. Still, apart from minor professional jealousy, the group's morale seems high. The program has been well accepted, and there clearly will be a demand for the services of the graduates. Other communities are trying to start similar schools. Recently one of the medicine men had one of his students perform a sing over him.

My sessions are a full day every two weeks. Before I started holding them I met with the medicine men to describe what I intended to do and to ask their permission. To my great pleasure they not only agreed to my plans but said they would like to attend along with the trainees. Attendance has varied from time to time, but usually most of the trainees are present as well as three to five of the medicine men. During the first year I talked about somatic medicine, attempting to cover elements of anatomy, physiology, pathology, diagnosis, and treatment. I discovered that the entire group, including the trainees, had considerable knowledge of anatomy and some of physiology. The sessions were lively. The medicine men and the trainees enjoyed trying out stethoscopes, otoscopes, opthalmoscopes, and blood-pressure cuffs. Microscope slides of blood smears and pathology specimens were also very popular. In return I was learning more about ceremonial practice, although not as much as I was to learn the next year when we began discussing psychology.

One of the high points of the first year was a visit that the group made to the Gallup Indian Medical Center. It was characteristic, I thought, that the two things the medicine men most enjoyed seeing at the hospital were an operation and a particularly good view of a sacred mountain peak from the windows of the psychiatric ward. They also had criticisms and suggestions. They were horrified by the pediatric ward because the children were so lonely. They kept asking, "Where are the parents?" They urged that better provisions be made for parents to stay with their children. They also suggested that we build two hogans at the hospital for ceremonial purposes. They remarked that they all had performed brief ceremonies in the hospital but that they could do more in a real hogan. They said that the medical staff could see the patients during the sing and could go back and forth if necessary. Their suggestion still has not been followed, but I hope that it will be soon.

During the second year I began discussing psychiatry, and in this area there has been more of a two-sided interchange. We have spent much time on European and Navajo notions of the unconscious, a subject in which difficulties in translation have been great. Navajo metapsychology still largely eludes me, but it is clear that the medicine men know about the dynamic interpretation of errors and dreams. We spent a great deal of time discussing dreams and were pleased to discover that all of us followed the same custom with regard to them. We all, it turned out, spend our first waking moments in the morning contemplating and interpreting our dreams. One of the medicine men gave an example. He had dreamt about an automobile accident and said that that kind of a dream meant something serious was going on within him and that in order to prevent some disaster from happening to him, it was important to perform a chant about it.

There has been a good deal of case presentation on both sides, particularly, for some reason not clear to me, regarding returned Viet Nam veterans. My feeling of trust and closeness to this group ultimately became such that I presented my own case, describing some things that had led me to enter my analysis and something of the analysis itself. When I finished this rather long account, one of the singers asked me the name of my analyst and where he is now. When I told him, he said, "You were very lucky to find a man who could do so much for you. He must be a very intelligent person."

Another high point for me was demonstrating hypnosis. The group ordinarily looks half asleep—as seems to be the custom with medicine men in meetings. This was unnerving at first, until I found out from their questions and comments that they had been paying very close attention. When hypnosis was demonstrated, however, they were obviously wide awake, although at times I wondered if they were breathing. Working with a carefully prepared subject (I was unwilling to face failure before this audience), I demonstrated a number of depth tests, somnambulism, age regression, positive and negative hallucinations, and some posthypnotic suggestions. When I was done, one of the faculty members said, "I'm 82 years old, and I've seen white people all my life, but this is the first time that one of them has ever surprised me. I'm not surprised to see something like this happen because we do things like this, but I am surprised that a white man should know anything so worthwhile." They also pointed out the resemblance of hypnosis to hand trembling, a diagnostic procedure in which the shaman goes into a trance and his hand moves automatically and indicates the answers to important questions. After we had discussed the similarity, they asked that my subject, a young Navajo woman, diagnose something. I objected, saying that neither she nor I knew how to do this and that it was too serious a matter to play with. They insisted that we try, however, and finally we decided that a weather prediction was not too dangerous to attempt. They were particularly interested in the weather at that time because we were in the midst of an especially severe drought, and someone in the community had predicted that it would continue for another year. When my subject was in a deep trance, I instructed her to visualize the weather for the next six months. She predicted light rain within the week, followed by a dry spell of several months and finally by a good rainy season in late summer. I make no claim other than the truthful reporting of facts: She was precisely correct.

My involvement in this project has, of course, been extremely interesting to me. It is hard, however, to assess the effects of the project on the medicine men and on me. The medicine men say that they know better when and how to refer patients to the white doctors, and I think they feel more kindly toward us. In turn, I feel better able to understand my Navajo patients and know better when to refer them to medicine men. I have adopted some Navajo styles of thought, I think. I use hypnosis more than I used to. And one of my Navajo colleagues in the Indian Health Service Mental Health Program claims that I try to act like a medicine man all the time.

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Psychiatry in South Korea

BY SUK C. CHANG, M.D., AND KWANG-IEL KIM, M.D.

A study of the developmental history of psychiatry in Korea is instructive since in Korea the forces of tradition (particularly shamanism, folk medicine, and religion) and the forces of modernization are sensitively reflected.

MODERN PSYCHIATRY has a rather short history in Korea. Introduced during the Japanese occupation, which lasted from 1910 to 1945, it was descriptive-organic (Kraepelinian), the model prevailing in Japan at that time (1). Only a few psychiatrists were trained at Keijo Imperial University (now Seoul National University); consequently, when Korea regained her independence in 1945 at the end of World War II, psychiatry in Korea had a very narrow base.

In traditional Korean society the need for psychiatry seemed less urgent than the need for other medical specialties that have more visible and more clearly defined ailments to deal with. Also, Korean society had a repertoire of built-in sociocultural mechanisms that had a preventive or even curative effect on man's psychological distress. Four such traditions can be briefly described.

Shamanism, the earliest religion in Korea, was introduced there during prehistoric times from northeast Asia. It is still prevalent in the rural areas and especially among women and the uneducated. Shamanists believe in a universe where the inanimate as well as the animate object is endowed with spirits. Man's misfortune is considered to result from an improper relation with the spirits; thus, to relieve man's distress, a qualified mediator (between the world of man and the spirits), the *mutang,* is called in to perform the ritual called *goot,* through which the relationships are harmonized. There are two types of mediators: the "charismatic shaman" who becomes qualified to have close rapport with the spirits through her own psychological experience, and the "hereditary shaman" whose qualification derives from heredity, as in the case of a daughter of a shaman (2–4). About 80 percent of shamans are women.

Buddhism was introduced from China in the fourth century and spread widely. The level of its influence and official acceptance has fluctuated, often in inverse relation to the official status of Confucianism; Buddhism peaked during the 11th to the 14th centuries. While Confucianism as a rational ethical system has appealed more to the literate man, Buddhism seemed to have a wider appeal to women. Buddhism has a sophisticated cosmology and psychology, but the version popularized in Korea has been vulgarized and fused with shamanism; its more intellectual version has remained confined to a small number of scholars.

The relevance of Buddhism in the treatment of mental patients has been discussed elsewhere (5, 6).

Confucianism can be considered as essentially a rational, ethical system whose overriding concern is man's relation to society, unlike Korean shamanism and Buddhism, one of whose explicit functions has been to provide psychological help and the promise of relieving man from his misfortune and misery. The appeal of Confucianism was confined largely to literate men. Introduced from China during the early Koguryo dynasty (378 B.C.?–668 A.D.), and having attained the status of a state ideology during the Yi dynasty (1392–1910), Confucianism left a profound social and intellectual legacy. This was perhaps felt more on a conscious and explicit level than shamanism or Buddhism.

Korean folk medicine consists largely of herb medicine, acupuncture, and moxa; introduced from China, these forms of treatment are still prevalent. Even today, the large majority of potential psychiatric patients from the rural and coastal areas, and even many city dwellers who are uneducated or poor, will resort to such types of therapy.

In a largely agrarian society embedded in tradition,[1] where man was preoccupied with meeting the urgent physical and material needs of his daily life, possession of mental stamina was a necessity. But when the situation demanded, there were resources available such as shamanistic rites and folk medicine that were congruous with the people's life-style and continuous with their conscious and unconscious values. The tiny pocket of psychiatric care—part of Western medicine—remained largely alien to the majority of Koreans, except perhaps as a last resort.

Then came 1945. As Korea regained her independence from Japanese rule she was brought out of her seclusion as a "hermit kingdom" in a corner of East Asia and was thrust into the mainstream of the 20th century and into the vortex of the cold war; she found herself involuntarily divided into the South and the North. From 1945 to 1950 the mood of Korea was one of excitement, confusion, and culture shock, and turmoil prevailed. Then came the Ko-

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[1] Detailed information on the historical background (7) and on sociological and anthropological factors (8) is available.

rean War, which ended in 1953. Social conditions between 1945 and 1953 were hardly conducive to healthy growth of the society; even a maintenance of the status quo required considerable effort. Following the war, large-scale emigration of Korean physicians to the United States began, and a significant number of them specialized in psychiatry. It is of interest that Koreans showed more affinity for psychiatry than physicians from other parts of East Asia. Currently, the psychiatric manpower pool in Korea is composed largely of returnees from the United States.

THE PRESENT STATUS OF PSYCHIATRY[2]

Manpower

There are 98 psychiatrists and 82 persons in psychiatric residency training in Korea. Of the 98 psychiatrists, 25 percent are affiliated with eight medical schools (five in Seoul City and one each in Kwangju, Taegu, and Pusan City); ten percent are in military service; 34 percent in private practice; 28 percent in public mental hospitals (run by national, provincial, or city governments) or administrative positions; and three percent in miscellaneous jobs.

There are 2,590 psychiatric beds, with the following distribution: the National Mental Hospital, 600; three other public hospitals, 350; 30 private mental hospitals, 1,400; and eight medical school hospitals, 240.

To become a psychiatrist, one must attend premedical college for two years and medical school for four years, followed by one year of internship and four of psychiatric residency training. After the training, a qualifying examination is given; two-thirds of the applicants are reported to pass. The training is provided at 14 hospitals (eight in medical schools, four military, one private, and one national). The stipend for trainees ranges from $75 to $110 a month.

The monthly income of practitioners generally ranges from $1,000 to $1,500, although some earn as much as $5,000. The relatively high income is possible because most practitioners operate an inpatient facility (private mental hospital) as an integral part of their practice. However, living expenses are also high. For instance, although such basics as food are inexpensive, housing is very expensive in Seoul City, where the majority of psychiatrists reside. And an automobile is increasingly becoming a necessity; both the initial cost and maintenance are perhaps double those in the United States.

Incidence of Mental Illness

Few statistics on the incidence of mental illness are available, especially in regard to the urban population. A large-scale population migration during the Korean War and a large influx into Seoul City, which grew from one and a half million to six million inhabitants in less than 20 years, make such a study difficult.

Epidemiological studies of rural farming and coastal fishing villages were made in early 1960 (9); it was estimated that 0.2 percent of the population under study suffered from schizophrenia; 0.2 percent from epilepsy; 0.02 percent from manic-depressive psychosis; and 0.001 percent from general paresis. It has been estimated that 300,000 patients need hospitalization and that 150,000 beds are required.

Hospital Facilities

The total number of available hospital beds is 2,590; only 300 of these are for patients who cannot pay. Since the public welfare and health insurance systems are conspicuously undeveloped, only the relatively well-off have access to the hospital beds.

In the past, the large extended family often functioned as an emotional as well as an economic cushion for the unfortunate relative in distress, but industrialization and the lessening of extended family ties are making such traditional aids less available. However, for those who cannot afford or will not accept hospital treatment (who in fact make up the majority), folk medicine, shamanistic or Buddhist rites, or one of the mushrooming "new religions" are readily available.

The average length of hospital stay is from three to four months and most are of less than six months; only one percent of the patients stay longer than a year. The length of hospital stay is determined less by the nature or severity of the condition than by the financial circumstances of the patient (10).

The main treatment modality with hospitalized schizophrenic patients is somato-organic: tranquilizers are often used in combination with shock treatment (11). The use of this combination, which again is largely determined by economic reasons, is aimed at facilitating early discharge. However, psychotherapy is being utilized increasingly.

Some Culturally Determined Clinical Features

The incidence of hysteria is high. For example, one study showed that 12 percent of all admissions (and 20 percent of the female admissions) to Seoul National University Hospital were for hysteria (11); the symptoms were the classic ones (12, 13). This high incidence has been attributed to the low level of medical knowledge, the traditional repression of sexuality, a shamanistic influence that facilitates projection toward the external (supernatural) being as the source of psychic conflict, and the traditional inhibition of verbalization and expressions of emotion.

The incidence of senile psychosis is low (11). This is attributed to a traditional regard for the elderly and the protective environment provided by the family.

The incidence of alcoholism and related psychosis is also low. Drinking is regarded as a facilitator of human relations; solitary drinking is frowned upon and is rare.

[2] The figures given here are based on the situation about 1970. There has been considerable further development; an estimate of about a 20-percent expansion in psychiatric manpower and facilities seems reasonable.

Further, drinking is almost always accompanied by a substantial meal.

The low incidence of drug addiction is attributed largely to strict control of the drug traffic. However, habituation to nonnarcotic drugs such as barbiturates is increasing.

The incidence of sexual perversion is low; this is attributed to rigid segregation of the sexes and the assignment of distinctly different roles to men and women from childhood (11, 14).

In regard to schizophrenia, a common symptom is a paranoid delusion; often there is a political theme such as "spy," "secret agent," "high official," etc. In women, manifestation of a thinly disguised sexual theme is increasing, reflecting conflict between the rigid traditional sexual morality (repression and segregation) and the sexual liberalism that is now being conveyed through the mass media.

Shin-Byong, a culture-bound depersonalization syndrome, often occurs in the course of a prolonged psychosomatic illness, psychosis, or psychoneurosis. The possessed person has a "revelation" (through a dream, etc.) in which he is persuaded to become a shaman. The possessor is often the spirit of a departed ancestor. With his conversion into a shaman the patient becomes "cured" of his ailment. The prevalent belief among the uneducated is that the *Shin-Byong* can be cured only through a shamanistic rite and that the cured person is obliged to become a shaman himself. The incidence of *Shin-Byong* is decreasing (2).

PSYCHIATRIC ORGANIZATIONS AND PUBLICATIONS

The Korean Neuropsychiatric Association was formed in 1945, and an official journal, *Neuropsychiatry,* has been published since 1962. Originally published biannually, it is now published quarterly. Fifty to 60 articles appear annually, and 30 to 40 papers are presented at the annual meeting of the society. A textbook of psychiatry was published in 1969 (15). Since the early 1950s a dominant interest of Korean psychiatrists has been a functional approach to mental illness, with emphasis on psychoanalysis. Lately, however, their attention has been widened to include psychopharmacology as well as other organic modalities.

There has been a recent upsurge of interest in ethnopsychiatry (2–4), notably regarding shamanism, and significant studies on the psychology of the indigenous intellectual tradition (notable Korean Confucianism, Buddhism, and Taoism) and its relevance to mental health are being carried out (5, 6).

SUMMARY AND CONCLUSIONS

Until 1945, the fact that psychiatric resources in Korea were meager was compensated for by the preventive and curative elements within the indigenous cultural tradition, namely shamanism, folk medicine (herbal, acupuncture, moxa, etc.), and the Korean version of Buddhism and Confucianism.

Since the end of World War II, and as Korea regained her independence, the political-economic situation was such that her cultural orientation shifted toward the United States. In this context, Korean psychiatry became dominantly influenced by American psychiatry, especially its functional approach. One recurrent question has been the extent to which Western (American) psychotherapy is applicable in Korea. The current opinion is that it is applicable in principle, but with technical modifications. However, further experience is necessary since the question of the relative effectiveness and clinical validation of psychotherapeutic theory is difficult to judge. A recent upsurge in the psychological study of indigenous cultural traditions and their relevance to mental health can be viewed as a healthy development.

A serious problem in psychiatry, as well as in other branches of medicine in Korea, is the inequity of the care delivery system, the undeveloped welfare and insurance systems, and the relative lack of preventive measures.

A study of the developmental history of psychiatry in Korea can be both interesting and productive, since Korea is a country where the forces of tradition and of modernization, as well as the complex crosscurrents of cultural interaction in the society at large, are likely to be sensitively reflected.

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The Psychotherapy of Schizophrenia: Does It Work?

BY JARL E. DYRUD, M.D., AND PHILIP S. HOLZMAN, PH.D.

Empirical studies of the treatment of schizophrenia show the unequivocal ameliorative effects of psychoactive drugs. No comparable effects have been claimed for psychotherapy. As a result, psychotherapy has tended to be negated as a viable therapeutic factor in the treatment of schizophrenia. Yet the sophisticated drug evaluation studies are not matched by sophisticated assessments of psychotherapy. Serious methodological errors exist in the latter studies; there have been inappropriate outcome criteria, inadequate assessment procedures to measure change, unsound selection of therapists, and unclear diagnostic appraisals. The issue has been further clouded by the heterogeneous nature of psychotherapeutic interventions, comprising as they do—in contrast to the relatively simple administration of drugs—a congeries of methods, techniques, and goals. This paper examines some of the requirements for appropriate evaluation studies of psychotherapy of schizophrenic patients.

MANY A DIFFICULT QUESTION—such as the one posed here—has resolved itself into clearer focus by judicious rephrasing. The question as it appears in the title allows no clear-cut answer, brings us no nearer to fruitful understanding of the critical issues before us, and indeed may even be counter-productive—all for reasons of the ambiguities in the words "psychotherapy" and "schizophrenia" and in the vagueness of the meaning of "Does it work?" For most clinicians, the two key words, schizophrenia and psychotherapy, have stimulated confusion in that one man's schizophrenia is another man's schizophreniform psychosis, and in most researches the "Does it work?" challenge conjures up kaleidoscopic visions of outcome criteria merging into outcome criteria. What does "work" mean?

We therefore choose to begin by restating the question in a way that permits answers that are less representative of partisan views and more indicative of the current state of our knowledge. We hope the clarity that will emerge will be regarded as helpful and not merely as obsessional hair-splitting. In this brief paper, then, we will first attempt to clarify the question by considering each of its elements, and then go on to try to answer the challenge from the available data.

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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PSYCHOTHERAPY

For the sake of consistency we will confine ourselves here to speaking of one-to-one treatment, but with the clear understanding that this form of psychotherapy is a deliberate and specialized pursuit arising out of the patient's broader supportive milieu in which a variety of other psychosocial events occur. It is well to bear in mind that this milieu has always been with us. It operates on intensive psychotherapy wards just as certainly as on wards labeled "drug treatment only." It was the therapeutic agent in "moral treatment" (1) in the last century. It had its burst of enthusiasm as a therapy following the second World War and was then almost totally eclipsed by the advent of the phenothiazines, with their development of more precise measures of effectiveness. No one knew what the central effects of the drugs were, but research design was easy. Control and comparison groups could be marshaled; randomization, double-blind, and cross-over designs added elegance to the evaluative process. Another revival of interest in the milieu is now upon us as behavior-modification techniques make the milieu operate in ways that are more observable and controllable (2). Change indicators in behavior have become easy to specify, although the issues of generalization to the noncontrol and posthospital environment are still to be investigated. All of this is to say that we have hopes now of specifying more of the "nonspecific" therapeutic events in a patient's career.

One of man's characteristics seems to be his need for explanations (3). Our efforts to account for events are usually focused on a single aspect, called the "essential ingredient" of a transaction. Much of the disputation in our field is concerned with elevating one or another aspect of the total care of the patient, such as medication or psychotherapy, to this status, with a corresponding neglect of other factors operating in the patient's milieu.

As far as individual psychotherapy is concerned, there seems to be only a small gain from restating a view well known to psychiatrists: psychotherapy is not a unitary process. Yet for the sake of our argument let us repeat that psychotherapy is unlike most other therapeutic procedures; in surgery, for example, accurate diagnoses are possible and, on the basis of those diagnoses, rational treatments consisting of clearly defined procedures can be begun. In contrast, psychotherapy does not consist of a definite set of operations and the essence of the procedures is still a matter of personal preference, bias, and lively controversy. There is no "dose" of psychotherapy. The procedures subsumed under the "psychotherapy" label include the classical psychoanalytic procedure, those based upon it, and those emphasizing only understanding or affect-expression or modification of observable behavior by operant techniques—to name only a few of the occupants of this psychosocial Tower of Babel.

The people who present themselves for such treatment also comprise a heterogeneous group, obviously not suffering from a single, reliably diagnosed condition. Rather, a range of human problems is presented, including situational crises, neurotic conditions, character difficulties, and psychoses. Further, the people who present themselves for help from psychotherapists differ among themselves in striking ways: intellectually, characterologically, socioeconomically, culturally, in age, and in hosts of life experiences.

We could expand the list of complications in the use of the word "psychotherapy," but we will mention only one more: the enormous range of differences among psychotherapists. Whereas the technical operations of surgical procedures can be taught, and variations are a matter of general codification, psychotherapists can rarely be taught the ingredients of most psychotherapies: empathy, compassion, tact, timing, mutative intrusiveness, and interest in the various kinds of human problems that patients present. The therapist himself is therefore a crucial variable in the psychotherapeutic relationship. This is true not only insofar as orientation to psychotherapy is concerned, but also insofar as the kind of person the psychotherapist is.

From these considerations it would seem that the first element of the question should be changed from "psychotherapy" to "some psychotherapeutic procedures practiced by some psychotherapists."

SCHIZOPHRENIA

The word "schizophrenia," like psychotherapy, is an example of what may be called the "fallacy of misplaced singularity." Bleuler (4) of course spoke of "the group of schizophrenias," by which he recognized the heterogeneity of conditions subsumed under the label. The conditions include the clear-cut process schizophrenias, insidious in their onset in early adolescence and proceeding ever more malignantly into dementia; the oscillating, phasic schizophrenic conditions; the rigid, litigious paranoid schizophrenic processes that appear in the third and fourth decades of life; and the acute schizophreniform psychotic episodes, from which some patients apparently recover completely, as Laing (5) and Menninger (6) have described, and from which many more patients never reach a *restitutio ad integrum*. There are nonpsychotic conditions, too, that we label schizophrenic: the so-called latent schizophrenias, incipient schizophrenias, ambulatory schizophrenias (7), and even remitted schizophrenias.

Much of the research data emerging from family and genetic studies—e.g., those of Heston (8) and of Rosenthal, Kety, Wender, and Schulsinger (9)—point to even broader areas of concern than the area of syndromal descriptions; these studies suggest a spectrum of conditions that include people with severe neurotic symptoms and even those without pathology but who show a distinctive, novel, creative outlook on reality. In some studies it has been found that subtle evidence of thought disorder exists in a setting of normal social, occupational, and family behavior. From these studies perplexing questions about etiology arise: Are the serious schizophrenias to be considered etiologically related to the neuroses? That is, if one accepts a conflict etiology of neurosis, such as that presented by Freud, can one fit the schizophrenias into such a psychoanalytic model? Or, if one accepts such a thoroughgoing empirical model as the one Skinner (10) has outlined, in which all behavior is a learned outcome of their consequences, can one fit the schizophrenias into such an operant model?

It would appear that the second element of the question has resolved itself into "the schizophrenias," and has implicated an etiology that may be far more complex than the conditions for which the usual psychotherapies were developed. This position does not disavow the etiological importance of learning, family strains, and intrapersonal conflicts. Rather, with our expanding knowledge of genetic, biochemical, and quasi-stable personological factors, we prefer to think of all of these factors as "contributory" or "necessary etiological conditions" rather than specifically or uniquely causal in the schizophrenias. In keeping with Adolf Meyer's psychobiological approach (11), we recognize that a crucial diagnostic task is the assessment of the relative contributions of familial, genetic, conflict, biochemical, psychological, and sociocultural factors in order to be able to aim a treatment program at its proper target. For it would seem that in the severe, disintegrated schizophrenic conditions a plurality of therapeutic methods would be called for, simultaneously or sequentially, rather than reliance on one technique alone. Thus the early treatment steps may well be focused on reducing the ambiguity of the environment in an operant conceptual framework, to be followed by

more stress on the therapeutic relationship, perhaps in conjunction with phenothiazine administration.

DOES IT WORK?

We have already alluded to the ambiguities in this question. The "it" is really "they," and by "work" we need to specify more precisely the outcomes we expect or hope for in the various kinds of schizophrenic conditions. If the expectation is merely discharge from a hospital, the overwhelming weight of evidence presents psychotherapy as having very little effect (12). The phenothiazines alone claim clear justification for an ameliorative effect, and even those original generalizations are having to be revised to take into account the diversity of the schizophrenias. Goldstein (13), for instance, suggested strongly that nonparanoid schizophrenic patients with good premorbid adjustment may be adversely affected by phenothiazines. Overall, however, research suggests that psychotherapy either alone or in combination with the phenothiazines contributes no significant reduction in the hospital stay of schizophrenic patients. We do not challenge the validity of these findings. A critical issue, however, is the nature of the criterion of outcome as it relates to the process of treatment. The criterion for discharge from a mental hospital may have little relation to much else about a patient except his greater manageability. Many other aspects of the patient's condition may not be considered in this decision. For example, relevant issues should include: 1) whether he can gainfully support himself and his family, or, if the patient is a woman, whether she can return to her specific occupation, whether this be gainful employment or homemaking; 2) whether he can be reintegrated into the community; 3) whether there can be developed self-generating behavior that brings a significant pleasurable return (this would include, for younger patients, help with career lines, resuming school, occupational training, and the learning of social skills).

It is obvious, after short reflection, that the criterion of discharge from the hospital is not one that favors the identification of psychotherapy as a viable therapeutic tool. Not the least of the reasons for its inappropriateness is the fact that psychotherapy hinges on a subtle yet powerful factor of trust—a feeling of respect, expectation, and hope that the patient develops. These attitudes take time to form and more time to nurture. The therapist, whatever his persuasion, attempts to break into the isolation, loneliness, and (for many patients) the terrifying world of bewildering instability to become a stable figure on whom the patient can rely for advice, direction, interpretation, or mere presence. Therefore, one gets another perspective on the effectiveness of psychotherapy if one uses the rate of relapse as the criterion of outcome.

While we await the follow-up data from the Camarillo study (12), the Hogarty-Goldberg (14) results strongly endorse a psychotherapeutic contact as having a significant effect on holding down rehospitalization rates. The psychotherapy employed in that study was a variant of avuncular guidance called "major role therapy." It was essentially vocational counseling and social casework in the context of firm interpersonal bonds. The statistics are instructive: At the end of 12 months after discharge from hospitals, 72 percent of the placebo-alone group relapsed; 63 percent of the group receiving placebo plus major role therapy relapsed; 33 percent of the phenothiazine-alone group relapsed, and 26 percent of the group receiving the drug plus major role therapy relapsed. Clearly, major role therapy helped reduce relapse rates more than drugs alone did. But even more striking is the fact that the principal effect of the major role therapy began to show itself only after seven months, particularly in combination with maintenance drug therapy. Individual differences among relapsers and nonrelapsers point to the necessity for further defining groups of patients along relevant demographic, cultural, clinical, and personologic characteristics in order to assess which patients will significantly profit from the particular brand of psychotherapy under study.

The Hogarty-Goldberg study, then, is consistent with the view that psychosis is a phase of a schizophrenic adjustment which requires resolution by the most efficient means possible. Following this phase, a period of habilitation may be profitably introduced for some patients. For which patients the psychotherapeutic phase is required is a matter to be left to systematic research. There are many acutely schizophrenic patients who improve dramatically regardless of what we do; there are those who remain psychotic in spite of what we do; and there is a group of patients for whom it matters very much what we do. The question remains open as to what treatment is appropriate and adequate for which patients. What is missing from our research armamentarium is the use of sensitive instruments to detect the myriad intrapersonal changes that occur with and without psychotherapeutic intervention. There is no a priori reason to assume that the fantasy meaning attached by the patient to events in reality can be influenced only by one-to-one psychotherapy. Other clarifying interactions can occur on the ward, medication *can* clear cognition, and direct behavioral intervention as an access route to revamping symbolic processes remains a real and unassessed possibility.

A small number of dedicated psychotherapists who have devoted many years to the treatment of small numbers of patients have reported sporadic success with their schizophrenic patients; these include Fromm-Reichmann (15), Searles (16), Wexler (17), Will (18), Sullivan (19), and Ekstein (20). While no systematic evaluation of the schizophrenic process was attempted by these gifted people, the length of time and the great absorption required for this kind of intensive procedure would make it unfeasible for use with the vast numbers of people diagnosed as schizophrenic. The theoretical rationale of this approach to psychotherapy assumes that the schizophrenic condition, like a symptom neurosis, is a compromise outcome of unconscious conflicts, resolvable with less pain to the person by psychoanalytic exploration. Without denying the role of internal conflict in schizophrenic disorganization, we would opt for relegating to it a contributory significance, secondary to what Freud called a "narcissistic disturbance," and translating

it as "structural and developmental deviations in respect to one's self-feeling." Nonpsychological variables, we believe, must be recognized in this context, and to that extent pharmacologic treatment should be considered as part of the treatment program, particularly when psychotic symptoms are manifest. Since the investment of time is so great in this particular kind of psychotherapy, we would endorse it as a technique for research into the schizophrenic experience rather than as an efficient therapeutic agent.

In a number of studies evaluating the relative merits of somatic treatment versus psychotherapy, it would seem that a principal reason that nonpsychological treatments such as drugs are consistently superior to psychosocial measures is that the special target of each therapy has not been recognized. Drugs will reduce thought disorganization, quiet an unruly and excited patient, or mobilize a withdrawn patient. It remains for psychosocial interventions to teach and to train, to reassure and to raise self-confidence, and to help with skills for living that some patients may never have learned or may have learned badly. These interventions take time to become effective, but when they do there is some evidence, of which we need more to be certain, that less medication is needed to maintain a patient in a stage of remission.

NEED FOR REVIEW OF PSYCHOTHERAPY STUDIES

In the early 1960s the field of the biochemistry of schizophrenia received a searching examination by Kety (21, 22), who found many of the studies to be methodologically deficient. He seriously questioned unwarranted conclusions. This review had the effect of improving the standards of many of the studies and ushered in a new era of biochemical advances with respect to schizophrenia. The field of the psychotherapy of schizophrenia could well profit from a similar intensive review of studies. That review would surely point to several of the issues raised in this paper. First, the nature of the outcome criteria: What is it that we expect psychosocial interventions to accomplish—in which patients, at what stage of the disorder, by what kinds of therapy? Second, what is the role of intrapsychic conflict resolution in the treatment of the schizophrenias; at which stages of the disorder would it seem irrelevant, and at which stages would it seem helpful to introduce such a therapeutic regimen? Third, what is the role of teaching living skills and to which patients? And fourth, what qualities of patient and therapist should be matched? This last point, one not developed in this paper, impresses us as having important consequences for effective treatment. The Whitehorn-Betz categories of group A and group B therapists (23) began the search into this area; we need now to probe further into this question, including the cognitive-stylistic organization (24, 25) of both patient and therapist to study its effect on various outcomes.

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The Psychotherapy of Schizophrenia: An NIMH Program

BY RAYMOND J. FRIEDMAN, M.D., JOHN G. GUNDERSON, M.D., AND DAVID B. FEINSILVER, M.D.

The authors discuss a current NIMH program whose purpose is to study the empirical knowledge of senior psychotherapists who treat schizophrenic patients and to translate this knowledge into potential research data. Such data, it is hoped, may add a new dimension to the treatment of the schizophrenic patient, which currently emphasizes the use of drugs. Thus far, the five groups of therapists who comprise the program have agreed upon a working definition of schizophrenia, the qualities of patients and therapists who do well in therapy, and the task of the initial treatment phase.

IN THIS PAPER WE WISH TO DESCRIBE the status of an NIMH experimental pilot program that has been in operation for one year and whose purpose is to examine the empirical knowledge of senior psychotherapists who specialize in the intensive long-term treatment of schizophrenic patients. The major goal of this venture is to translate the often intuitive notions of these psychotherapists about the schizophrenic process and its treatment into variables that can be reliably observed and into hypotheses that can be tested.

One assumption that underlies our renewed interest in and attention to this domain of treatment is that current therapeutic efforts, with their strong emphasis on drug treatment, have not significantly affected the long-term social adaptation of schizophrenic patients (1). It is hoped that the era of warfare between proponents of the various therapeutic modalities is at an end, especially the chronic feud that has existed between those schools advocating psychotherapy and those espousing drug treatment, each to the exclusion of the other. As May (2) has stated, drugs may be "the single most powerful and economic treatment for schizophrenic patients." While the phenothiazines represent an undisputed addition to the therapeutic armamentarium, perhaps we hope for the impossible if we expect a drug to alter the myriad of social and interpersonal problems and deficits in learning that beset schizophrenic patients.

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

At the time this work was done, Drs. Friedman and Gunderson were both with the Clinical Research Branch, Division of Extramural Research Programs, National Institute of Mental Health, Rockville, Md., where Dr. Friedman was Assistant Chief, Depression Section, and Dr. Gunderson is Assistant Chief, Center for Studies of Schizophrenia. Currently, Dr. Friedman is in private practice at 11665 West Olympic Blvd., Los Angeles, Calif. 90064. Dr. Feinsilver is a Staff Psychiatrist, Chestnut Lodge, Rockville, Md.

Our impression is that the enthusiasm generated by the discovery of the phenothiazines, when coupled with the new, sophisticated studies of the biological and genetic aspects of schizophrenia, has stimulated hope for the future but has also spawned a measure of despair in the present by overshadowing psychosocial modalities. The question of whether individual psychotherapy with schizophrenic patients is efficacious remains in dispute. Despite the gloomy nature of the conclusions drawn from most of the existing outcome studies (3), therapists working with schizophrenic patients remain convinced that their ministrations are effective and produce profound changes in the patient's internal state, as well as in his rapport with the environment.

The second assumption upon which the current endeavor rests is that certain therapists working with particular patients do effect significant and lasting changes. Strupp and Bergin reached a similar conclusion concerning the individual treatment of neurotic patients, and both Strupp and Bergin (4), as well as Robbins (5), emphasized the need to study the work of experienced psychotherapists—a deficiency of most current outcome research.

There are several possible methods of employing the expertise of senior psychotherapists in research. Perhaps the most obvious and direct approach, although one fraught with great difficulty, is to employ gifted senior clinicians as the therapists in outcome research. A second approach, which we believe represents a more modest goal and an essential first step in the direction of eventual outcome research, is to engage senior clinicians in specifying the various dimensions of the often nebulous term "psychotherapy." Only when we begin to specify which type of therapist working with which type of patient with what specific techniques and in what specific settings will we have identified enough of the critical variables to begin to initiate relevant outcome research.

Senior clinicians as a group have been distant and at times even hostile to research endeavors. By inviting them to discuss the therapy they do and to keep in mind its potential for research, we hoped to address another major problem confronting the field of psychotherapy research, which was highlighted by Strupp and Bergin (4). They noted that "thus far research in psychotherapy has failed to make a deep impact on practice and technique." We believe that one reason for the limited feedback between psychotherapy research and clinical practice stems from the fact that, somewhere in the process of translating the techniques of successful therapy into variables that qualify for rigorous research, clinical relevance is compromised and sometimes totally lost. We believe that

one method of strengthening the links between research and clinical practice is to involve the experts, the treaters, in the very process of research design.

As a final note of introduction, we should emphasize that this venture has been undertaken with somewhat guarded optimism, for as Rosenthal (6) has pointed out: To ask therapists to describe what they do is analogous to asking artists to explicate their sources of inspiration and techniques of execution—a notoriously difficult task.

THE APPROACH

Five discussion groups have been established in the following locales: Washington, D.C., Chicago, the New England area, San Francisco, and Los Angeles. The group members[1] have met on the average of twice a month during the past year. A group is composed of five or six senior psychoanalysts, each averaging approximately 20 years of experience in treating schizophrenic patients. At the initiation of this program we approached psychoanalysts because of their well-known and almost exclusive interest in long-term intensive individual psychotherapy.

Although no systematic formal effort has been made to assess the theoretical leanings of the various group members, we can, with some assurance, state that a broad spectrum of theoretical positions is represented. Clinical experience, a reputation for success in treating schizophrenic patients, and compatibility as a group member were the criteria generally used for inclusion in the program; no attempt was made to balance the groups by theoretical stance.

The NIMH mandate to each group was deliberately presented in a broad and often hazy manner in order to facilitate group autonomy and to allow each group to pursue its own interests. At the inception of the program no obligation was negotiated with group members, and none was intended beyond the first meeting. Thus, the involvement of these men in subsequent meetings represented their continuing interest and not the fulfillment of a prearranged contract with NIMH. In order to facilitate and to provide a launching pad for discussion during the first phase of the project, we distributed the following questions to each group prior to its initial meeting: 1) How do you operationally conceptualize the nature of the schizophrenic's difficulties? 2) How do you characterize the kinds of schizophrenic patients who profit or fail to profit from individual psychotherapy? 3) What are the essential characteristics of therapists who work well with schizophrenic patients?

[1] The participants include: Drs. Marvin Adland, Nathaniel Apter, Gerald Aronson, Jarl E. Dyrud, Stanley Eldred, David Feinsilver, John P. Fort, Beatriz Foster, Alfred Goldberg, Ralph Greenson, Roy Grinker, James Grotstein, Philip Holzman, Lawrence Kayton, Arthur Malin, Herbert Meltzer, Clarence Schulz, Daniel Schwartz, Elvin Semrad, Helm Stierlin, Milton Wexler, Otto Will, Emanuel Windholz, and Lyman Wynne.

THE RESPONSE TO QUESTIONS

Working Definition of Schizophrenia

Mosher (7) has argued that, in research project protocols, the inclusion of a working definition of schizophrenia which concerns psychosocial treatments of the illness will enhance the prospects of future replication of findings. Surprisingly, the task of defining the disorder produced the least amount of disagreement among the groups. A composite definition, based on the responses of the group participants to the first question, follows.

> Schizophrenia is a disorder of ego functioning caused by developmental, parent-child experiences (which may include biological-constitutional elements) which results in a deficit in the ability to separate out and maintain accurate internal mental representations of the outside real world. This deficit, in turn, causes the production of restitutional symptoms (delusions, hallucinations) which are most prominent when the individual is confronted with the stresses of developing independent, mature, trusting adult relationships.

Amendments to this definition would include the emphasis: 1) that individuals falling under this rubric are in reality not *that* qualitatively different from "normals"; 2) that it is primarily the mother-child relationship which is disturbed; and 3) that this definition, while implying homogeneity, should recognize the heterogeneous nature of those falling within it.

On examination of the definition the following observations seem noteworthy.

1. Except for the nature of the possible deficit and for the resulting restitutional symptoms, this definition could apply to other categories of psychopathology.
2. There was no rush to advocate a strictly environmentalist approach to the cause of schizophrenia. In fact, there was frequent acknowledgment that some poorly defined constitutional or biological factors may be at work in the schizophrenic. The clinician-participants did not view the possibility of a genetic predisposition as incompatible with their pragmatic approach of doing whatever was possible.
3. The concept of a schizophrenic inability to maintain internal mental representations was articulated in a variety of ways by group members. Although the participants described many different aspects of the same phenomena, the differences in their descriptions ultimately seemed to be more semantic than real.
4. The basic schizophrenic psychopathology is at least in part a derivative of early primary relationships to parents and the conflicts in those relationships that have led to primitive ego functioning.

Patient Characteristics

The following discussion focuses on patient variables that are hypothesized to relate positively to successful prognosis in therapy:

> Schizophrenic patients who tend to profit the most from individual psychotherapy are young and intelligent (IQ above low normal), "reactive," and present during their first

break in an acute manner. They have a past history of achievement at work and in other creative activities, as well as some success in interpersonal, especially heterosexual, relationships. They are motivated and tend to experience "pain" or the sense of a "struggle" and definitely see themselves in need of help. They often appear to be striving actively for higher levels of functioning, and exhibit some degree of the following capacities: self-observation, problem solving, integrating experience, self-control and the ability to delay gratification.

A history of hospitalization as an independent variable (that is, as independent of chronicity) was not felt to be highly related to outcome. In addition, the depth of regression (especially during the acute phase) was not considered a significant prognostic variable.

We can only speculate about the rather pedestrian quality of this summarized discussion concerning patient variables and offer the suggestion that perhaps the strong emphasis placed on therapist characteristics as being critical for positive outcome overshadows a more in-depth consideration of patient characteristics. However, it may well be that there is simply nothing radically new or different to be added, even by these distinguished clinicians, to the existing research literature in this area (8, 9).

Therapist Characteristics

During both preliminary and subsequent meetings, the subject of therapist characteristics received considerable attention from all of the groups. Two general characteristics repeatedly emerged from their discussions. The first concerned the therapeutic zeal necessary for long-term intensive psychotherapy with schizophrenic patients. This characteristic represents a deep "personal" need on the part of the therapist to help this particular type of patient. There was recognition that such a sense of mission may indeed represent a "rescue" fantasy or a desire to play God. Thus, while the virtual necessity of this "near-driveness" was recognized, the stipulation was made that such a drive be well integrated into the therapist's personality so that it is reasonable and manageable.

The second primary constellation of characteristics associated with therapeutic success with schizophrenic patients and also correlated with the optimism and enthusiasm necessary for this type of work concerns the ability to tolerate extreme frustration, despair, helplessness, and often lack of progress in therapy. Lest we foster the image of the therapist as a paragon of perfection, it should be noted that group consensus existed that therapists who treat schizophrenics have, in general, suffered painful life experiences which tend to render them "honest," "real" people who have struggled to attain a strong sense of identity. Perhaps the suggestion of omnipotence that threads throughout the discussions relates not so much to the perfection of the therapist's personality as it does to his awareness of and attempts to master his imperfections, which will be so severely challenged by his schizophrenic patients.

Overly perfectionistic and excessively critical people will tend to be among those who continually fail in attempts to treat schizophrenic patients. While perseverance and even a sense of being driven is necessary for success, therapists who are motivated by a guilt-ridden feeling of omnipotence seem doomed to failure, as are therapists who tend to view schizophrenic patients as superhumanly precious or fragile.

The personality characteristics of the therapist have emerged as the set of factors that are hypothesized to be the primary determinant of success or failure in intensive therapy; issues of technique, while important, have not been accorded so high a status.

The Initial Phase of Therapy

The groups were unanimous in identifying that the primary task of the initial phase of therapy with the schizophrenic was the establishment of "contact," a term that defies exact definition but refers to "attachment behavior" and a "trusting relationship." While establishing contact, offering the patient the possibility of being understood, and beginning to develop a relationship that will allow him to view the therapist as a constant, reliable, and predictable person, many believe that the therapist is also called upon to exhibit a number of behaviors, including caring for and about the patient, attempting to understand him, fostering dependency, being reliable, and, above all, appearing as a real person to the patient. The therapist will often be called upon to assume the role of an auxiliary ego, helping the patient to deal with numerous daily problems of a here-and-now nature and to correct his misperceptions of the world.

SUMMARY

We have described the NIMH program on the psychotherapy of schizophrenia and the principal areas of agreement among participants in five geographically based discussion groups about an operational definition of schizophrenia, the qualities of patients and of therapists who do well in psychotherapy, and the initial stage of treatment. It is understood that this presentation is a partial account of the broad range of topics discussed by the groups and, in particular, has not attempted to deal with topics the groups are currently exploring in depth. We are already certain that this endeavor has allowed for many meaningful exchanges among group members and that the yield from this program will certainly include an enriched perspective on the finished and unfinished business of this field.

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Controversies About the Psychotherapy of Schizophrenia

BY JOHN G. GUNDERSON, M.D.

The author discusses the current controversies over the psychotherapeutic treatment of schizophrenics that have come out of an NIMH program involving experienced clinicians. The controversies concern where to focus content, what techniques to employ, and what theories can be derived from intensive psychotherapy with schizophrenic patients. He concludes that studies of interactional variables and greater communication among clinicians are required to facilitate an understanding of what the therapeutic effects of such psychotherapy may be.

CONTROVERSIES HAVE EMERGED among the participating senior therapists [1] in the NIMH-sponsored project on the psychotherapy of schizophrenia (1). These controversies reflect the state of the art in 1972, and this paper will attempt to cite and explicate them.

Practically everyone has strong opinions about whether individual psychotherapy is an indicated treatment for schizophrenia and, if it is, what form the psychotherapy should take. Research attempts to answer these questions have provided incomplete solutions (2). Since all of the participants in the NIMH program advocate the individual, psychoanalytically oriented psychotherapy of schizophrenic patients, the controversies described here do not concern efficacy but, rather, what kind of intensive psychotherapy should be given and for what reasons.

The three areas that the program participants found controversial were: 1) focus (What? What is the area of principal investigation and discussion in the interviews?); 2) technique (How? What methods does one employ to pursue the psychotherapeutic goals?); and 3) theory (Why? What is the rationale for the treatment approach one employs?). It is understood that the positions described here are polar extremes that neither necessarily reflect the mainstream of thinking on these topics nor represent positions that are rigidly adhered to, even by those who recommend them. The dichotomies in approach are often not mutually exclusive. The debate is more frequently one of emphases, priorities, or sequence.

FOCUS

The controversies over focus have concerned the initial stage of psychotherapy. Differences in approach can be seen in terms of what time parameters in the patient's life and what differing ego structures the therapist addresses in the initial phase.

Time Parameters

Some therapists focus on the patient's past, others on the immediate present, and still others on the future.

Those whose focus emphasizes the past would begin by asking the patient, "What happened?" This approach emphasizes the importance of integrating the precipitating circumstances (3, 4). The therapist sees the patient's distortion and projection as avoidance techniques and asks him to remember his painful, but real, life crises. It is necessary for a patient to recognize him-

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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The author wishes to thank the participants in the NIMH psychotherapy program and particularly Drs. Stanley Eldred, Alfred Goldberg, and Loren Mosher for their help in preparing this paper.

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self in terms of his past and to see his present life as a continuum of that experience.

Other therapists doubt whether many schizophrenic patients are aware of their precipitating crisis or are willing to deal with it early in treatment. If not, they then suggest that the crisis must be reexperienced and worked through in relationship to the therapist. Still others see in this approach the danger of the therapist imposing too much of his own theory and too many of his own expectations on the patient, thus not following the patient enough.

The second approach, i.e., the present, would address a different question in the initial phase: "What are you experiencing?" This draws the patient's attention to his immediate reality and emphasizes the importance of his interaction with the therapist in ultimately coming to understand himself. Advocates see this process as critical in helping patients define their psychological (5, 6) and biological (7) self. This approach would directly take up the patient's feelings and their connection with the therapist. An effort would be made to understand the function served by the patient's operating defenses. This process might be likened to that used in ego or character analysis. Opponents to this approach say it does not address the patient's presenting psychopathology as a reaction but as part of his usual personality.

The third orientation would focus on the patient's future. The question asked here would be: "What do you want for yourself?" This question appeals to the patient's need to make decisions, to plan, and to organize. It draws the patient's attention to the aimless course his life has taken and to the maladaptive aspects of being psychotic (8). Proponents (9, 10) point to the antiregressive function of this approach and emphasize the importance of supporting the patient's development of competence and sense of efficacy from using problem-solving capacities (11). However, this approach seems to be vulnerable to the criticism that internal satisfaction depends on more than leaving home, being competent, and pursuing what one wants; that is, it depends on interpersonal relatedness. Being competent and efficacious may only be of use insofar as patients are rewarded by being loved.

Reality Versus Fantasy

Another issue regarding focus is how much attention should be paid to dreams and fantasies and how much to realities. The real-life approach views the schizophrenic's dreams and fantasies as avoidance techniques in one who is already too prone to avoid and distort what is real. According to this view, the schizophrenic is aided by more structure (being reminded of the discrepancy between reality and his fantasies and dreams) and by the therapist's role as a reality anchor (12). This contrasts with the Jungians (13) and with the following statement made by one participant in the study groups: "To really understand my schizophrenic patients, I need to understand their dreams and fantasies and spend a good deal of the analysis exploring the meaning of these." In the reality approach such an emphasis on fantasies is criticized for its danger of providing intellectual depth without the practical, reality-based connectedness that improves social adaptation.

Affects

Many therapists feel that schizophrenic disorganization is frequently a regressive response from intolerable affects (14). Opinions vary, however, as to exactly what affects the schizophrenic patient primarily needs help learning to deal with. Some clinicians see the schizophrenic's primary difficulty as recognizing and managing his aggression and its affective derivative anger (15, pp. 151–152, 16). By encouraging the patient to express anger directly they might avert the need for projection and eventually modify basic concerns about omnipotent destructiveness that are accentuated when loss is encountered. There is some research which supports the idea that therapists who focus on aggression tend to have better results (17).

Other therapists focus on the patient's need to remember the pain involved in the loss itself. This requires the patient to recognize what was positive or loved in the relationship that is now no longer available and is being missed (18). These therapists emphasize the schizophrenic's failure to acknowledge warmth, closeness, and pleasure. The primary affect called upon is sadness, and this process is not dissimilar to mourning. Along this line Searles (19) has concluded that the hateful expressions he chronicled in his early writing are basically "subsidiary to love" and "that such an ugly emotion as vindictiveness is basically a reaction against such positively-oriented emotions as separation, anxiety, and grief."

TECHNIQUE

The two major controversies about technique concern how one interacts with the schizophrenic patients.

Exploration Versus Relationship

The process of exploration might be described as a mutual patient-therapist effort to investigate and to understand the causes for the patient's dilemma. In general it is felt that this achievement will allow change, growth, and improvement. The therapist's ability to maintain objectivity in his observations of the patient is considered important. The relationship that develops between the patient and the therapist is viewed as necessary for the investigative task but not as primarily therapeutic itself.

There are therapists, however, who feel that exploration is less valuable with schizophrenics than with other types of patients. The emphasis on investigation, they believe, implies that the schizophrenic's problems are predominantly intrapsychic and does not give proper weighting to their interpersonal origins. These therapists instead emphasize the development of a "real" relationship (20) with their schizophrenic patients. In this view the therapist's role value is less one of objective inquirer and more one of subjective participant. His consistency and concern facilitate internalization (21). It is the experience of trusting and being cared about that

causes the patient's previous distrust to diminish and his low self-esteem to improve. The growing closeness of this relationship, then, provides an ego corrective experience.

Those who feel exploration is the primary vehicle of change believe that a trusting relationship is developed only after the patient is able to see what interferes with his getting close. Such a relationship is fostered by the therapist's active interest in having the patient share what he has avoided either by his telling the therapist or by the therapist's analysis of the patient's defenses against such closeness. In any event, the relationship develops as a result of the investigative process, and its importance exists predominantly—or only—in its usefulness in allowing further exploration. A third position, perhaps somewhere between the two, emphasizes the importance of investigating the ongoing relationship (22).

Closely related to this discussion of the relative importance of exploration and relationship in therapy are issues regarding the function of the therapist's interpretations, the proper use of support, and the ideal amount of activity and structure that the therapist should provide. Complaints have been registered that interpretations can be harmful because they are experienced by patients as assaults and may lead to further regression in that schizophrenics need to repress more, not less (12, 23, 24). On the other hand, some consider that supportive techniques underestimate the patient's strengths and prolong treatment. In a similar way, too much activity by a therapist is considered to carry the risk of imposing too many of one's preconceptions and demands on the patient, while its opposite, impassivity, is criticized for encouraging projection and increasing separation. Again, as with the other variables, the two sides to these issues are not incompatible, and invariably the advocates for either technique are doing more of the other than they at first acknowledge. Hence, these debates may seem more clear-cut in theory than they do in practice.

Regression

Perhaps more than any other topic in the psychotherapy of schizophrenia, regression has become an emotionally charged area of disagreement. Signals expressing the extent of these feelings can be seen in the rhetoric opposing camps use to describe each other's treatment. In a more positive sense each point of view can present a consistent approach with a persuasive rationale.

Those who are permissive and accept the patient's psychotic regression see him as recreating the unresolved infantile disorder that must be lived through and grown out of in order to attain a stable higher level of ego integration. The unfolding of a primitive transference to the therapist and the formation of a symbiotic relationship requires the therapist's permissive acceptance. The resolution of this symbiosis is a process of self-object differentiation by which the patient leaves the previous level of object relations and develops true autonomy.

Therapists who favor active interventions against regression, which might include structured milieu, maintaining contact with the family, lending support to defenses, and sometimes ataraxic drugs, stress the importance of the patient's using his ego strengths in the service of integration. Too much disorganization and primary-process thinking make working together with the patient impossible. While the therapists in the NIMH program were uniformly hesitant to attribute much lasting benefit to drugs, for some therapists the drugs do play a helpful adjunctive role to psychotherapy by compensating a patient to a point where his talk is coherent and he is able to tie his affect to his life experiences.

Without attempting a facile reconciliation it seems that, at least in part, this controversy derives from the fact that therapists who work in long-term private residential treatment centers have had little experience with the advantages of limiting regression, while those who do psychotherapy in other institutional frameworks have rarely had the opportunity to observe the advantages of uninterrupted regression.

THEORY

There are substantial areas of theoretical disagreement that include both the conceptualization of the basic schizophrenic problem (unstable introjects versus affective intolerance) and the source of this problem (deficit or defense).

Many contemporary psychotherapists have observed the central significance of problems of separation in schizophrenics (18, 21, 22, 25). The regression to primitive thinking and narcissistic defenses is initiated by the intrapsychic reaction to the loss of or separation from a person the schizophrenic has been attached to. The nature of this reaction may be considered to reflect the loss of internal objects or ultimately a failure to tolerate certain affects.

To expand on the latter point first, at the time of the separation the schizophrenic experiences bodily affects toward the important other person. This affective experience is not integrated either because of an inability to formulate or to make sense of it (22) or because it is consciously or unconsciously associated with early unintegrated catastrophic experiences of rejection or failure. It is the expectation of failure involved in acknowledging positive attachments that makes warm affects particularly frightening. This, plus the schizophrenic's capacity for dissociation, eventually leads to the flight into psychosis from the affective accompaniments of loss. Clearly an implication of this theory is that therapists must be willing to tolerate strong affects and to help the patient experience affects more fully.

An alternative conceptualization of this process also emphasizes the importance of loss but sees as the critical problem the schizophrenic's silent loss of inner objects or internal object connections (26–28). Reference is being made here to a developmental failure among preschizophrenic children to internalize their mothers as a stable part of themselves that remains intact during separations. There results a persistent vulnerability to experience the loss of significant others as a loss of self. Clinically, this can be seen as ego disorganization and as the

schizophrenic's inability to clearly differentiate his own identity from the identity of others. Adherents to this theory stress the importance of the therapist's stable presence in correcting this problem.

Both of these persuasions allow for the possibility that the schizophrenic's observed problem may stem from an early unremedial and probably constitutional dysfunction (the deficit hypotheses) or from an environmentally induced response pattern (the defense hypotheses). It is possible, for example, that a metabolic abnormality could make a certain affective experience qualitatively different or that an inability to internalize could result from some type of constitutional learning or perceptual handicap (21, 29–31).

Conversely, according to defense hypotheses, these same phenomena are described as active ego-initiated maneuvers to avoid the unrealistic significance assigned to the affect (e.g., being angry equals killing, being sad equals dying) or to the internalization (e.g., the loss of self or the release of previously split-off aggression against the internal object). While the Kleinians are perhaps most outspoken in their view of schizophrenia as "defense," some more traditional analytic theorists (32–34) have also supported this position. An elaboration of this argument is beyond the scope of this paper.

CONCLUSIONS

Although differences have been highlighted in this paper, the conclusion seems justified, nonetheless, that there has been some narrowing of the theory and practice of psychotherapy for schizophrenia. There is less polarization of opinion about the necessity and value of regression and prolonged hospitalization, with some recognition of the shortcomings of any generalization. There is also some narrowing of the therapist's technique away from direct id interpretations and from the actual feeding of patients. In keeping with this there seems to be a trend toward acknowledging the need for a real therapeutic relationship along with the recognition that this by itself is insufficient without analysis of the aspects of transference. There is a general impression here of a more sober businesslike approach to psychotherapy with schizophrenics and of less romanticizing than when the field was still new. This is evident in the current lessening interest in pathology and increasing interest in practical issues regarding adaptation. There is less emphasis on the schizophrenic as a victim of deprivation and more interest in his role as a perpetuator of his difficulties.

Although this narrowing gives some promise of eventually attaining more unanimity in the treatment approach among psychotherapists who treat schizophrenics, the progress seems distressingly slow. These findings indicate a need for those who practice intensive psychotherapy with schizophrenics to communicate more openly, to experiment more with other techniques, and to learn from each other's experience.

In any event there are still major differences among these experienced therapists on the variables described here. Even when therapists share a common theory, their practice may differ greatly; by the same token, when therapists practice in markedly divergent ways, they may find that they share common goals and focus. While one can filter out different schools of thought and practice, it is a mistake to expect that there will be a natural continuity between the two. What one finds is that each therapist-theoretician has a unique and often surprising admixture of the parameters of therapy described here.

An implication of this observed heterogeneity is that research efforts made in the psychotherapy of schizophrenia are better directed toward measuring the effect on outcome that specific variables in the psychotherapeutic interaction have than toward comparing psychotherapy with other treatment modalities. This necessarily means that correlational studies of process variables are needed, rather than comparative outcome studies. Methods must be worked out for quantitatively assessing the presence or absence of the various variables in the interaction. This same conclusion has been reached in reviews of past comparative research efforts (2, 35, 36). It would also be of value to assess A- and B-type therapists along such variables as passivity, focus, theory, interpretative activity, and regression. A further implication is that, when a psychotherapy is being researched, the theory and methodology of treatment must be explicitly spelled out.

Clearly, a second area in which these divergent opinions have relevance is in training psychotherapists to do intensive work with schizophrenics. There is room at this stage in the developing science for a new therapist to experiment with different techniques, to allow his own personality to exert its influence, and to develop his own ideas of what in the interaction seems to affect outcome.

SUMMARY

Major controversies continue to characterize the psychotherapy of schizophrenia. Marked differences exist among therapists with respect to where to focus the content of early interviews—on the patient's past, his interaction with the therapist, his aggression or sadness, or his realities or fantasies. A major controversy about technique concerns the role of regression in treatment—how much to permit and when to attempt to prevent it. Finally, there is disagreement as to whether to conceptualize the schizophrenic's basic failure to manage the threatened loss of a sustaining object in terms of intolerable affect or unstable introjects and, in either case, whether this basic dysfunction is a deficit or defense.

There is a need for less provincialism and for more controlled studies on process variables. Much room remains for researchers and clinicians to benefit from each other's experiences. This will be needed if in the future psychotherapy of schizophrenia is to be influenced more by research results than it has been thus far. Psychotherapists must subject their practices to the tests of research if psychotherapy is to shift from an art form into a science.

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A Therapeutic Aftercare Setting for "Refractory" Chronic Schizophrenic Patients

BY PATRICK T. DONLON, M.D., RICHARD T. RADA, M.D., AND SARA W. KNIGHT, R.N.

Twenty-four chronic "refractory" schizophrenic patients were removed from a large aftercare clinic and randomly placed into one of two smaller clinics meeting biweekly. Both groups had the same therapist and both clinical settings attempted to provide nurturance and alleviate countertherapeutic interpersonal anxieties. The group that received nurturance in the setting of a social group (rather than individual supportive psychotherapy) responded much more favorably, as measured by cost efficiency, clinic attendance, and increased socialization.

IN THE PAST TWO DECADES there has been a marked shift in the treatment of the chronic schizophrenic patient from the inpatient setting to community mental health centers. Although the pathogenesis of the schizophrenias remains an enigma (1), neuroleptic agents have been found to play a significant role in psychic reintegration and rehabilitation of the schizophrenic patient. Frequently, however, the therapeutic role of the treatment setting is underestimated. The patient may be considered "refractory" or "poorly motivated" if he does not either respond clinically to his neuroleptic medication or follow the recommendations of his therapist. It might be more fitting, however, to investigate the shortcomings of the therapeutic setting, both in meeting specific emotional needs and in alleviating countertherapeutic anxieties existing within the individual patient. The purpose of this paper is to describe two treatment settings designed to examine these two specific areas with a group of chronically ill schizophrenic patients found to be "refractory" in a large aftercare clinic.

Twenty-four "treatment refractory" patients were removed from the large aftercare clinic and randomly placed into one of two biweekly clinics; they continued to receive fluphenazine enanthate. One group (Group A) focused on treating the patients in a socially oriented group setting; the other (Group B) focused on an individual supportive psychotherapeutic setting. The patients' responses to these two settings were compared by clinic attendance, degrees of increased socialization, and cost-efficiency.

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SUBJECTS

In July 1970, an aftercare clinic was established at the Sacramento County Mental Health Services to care for the large ambulatory psychotic population seen in one of its catchment areas. Clinic meetings were held twice a week, with approximately 25 to 30 of the clinic's 250 schizophrenic patients scheduled to attend a given session. The clinics emphasized multidisciplinary primary therapists, social interaction between staff and patients, an institutional alliance, refreshments, periodic entertainment, and an adaptive psychotherapeutic approach (2, 3).

Twenty-four patients were considered "treatment refractory" in the large clinic meetings. They were heterogeneous in age, race, socioeconomic class, duration of psychiatric symptoms, medication requirements, and total duration of psychiatric hospitalizations. All, however, had in common a marked anxiety in interpersonal relationships and a tendency to be aloof, suspicious, and noncommunicative. Positive rapport between the therapist or institution and the patients was absent in every case. The diagnosis of chronic schizophrenia or chronic paranoid schizophrenia was well documented for all patients on the basis of both the diagnostic criteria of Bleuler (4) and maladaptive life-styles.

Of the 24 patients, 11 were women and 13 were men. Their ages ranged from 19 to 51 years, with an average of 33. Seventeen patients were white, four Chicano, two black, and one Oriental. None was financially self-supporting and all were in socioeconomic classes IV and V (5). The total duration of psychiatric hospitalizations per patient varied from two months to 18 years, with a mean of 3.2 years.

All of these patients were considered difficult management cases. In the 18-week comparison period preceding their transfer to the new settings, seven patients required hospitalization for psychotic decompensation; three other patients made suidical gestures but did not require hospitalization. Furthermore, there were 48 unkept scheduled appointments, as well as 33 visits to the Psychiatric Crisis Clinic. All patients were placed on fluphenazine enanthate (a long-acting injectable neuroleptic) to better ensure their receiving medication. None was consistently maintained on a therapeutic dosage of depot medication, however, because all remained irregular in keeping their clinic appointments.

METHOD

It was hoped that these 24 aloof and suspicious "re-

fractory" patients would respond more favorably if placed under the care of a single therapist and in a therapeutic setting that would be more suitable for meeting their emotional needs and alleviating their marked countertherapeutic interpersonal anxieties. Two new clinics were established. One featured socialization and refreshments within a group setting, while the other offered closeness with the therapist through individual supportive psychotherapy but permitted emotional distance from fellow patients. The patients were matched as closely as possible for age, sex, duration of illness, severity of symptoms, and medication requirements and were then randomly placed into either Group A or Group B. The 18-week evaluation period consisted of nine biweekly clinic visits, each lasting one and a half hours. The groups met on alternate weeks. The primary therapist (S.W.K.), a psychiatric nurse, met with all 24 patients in consultation with a psychiatrist (P.T.D.).

Group A patients were warmly greeted in the therapy room by the primary therapist as they arrived at the Mental Health Clinic. They were immediately offered refreshments (punch, coffee, and cookies). The chairs were arranged in a circle. No attempt was made to use uncovering psychotherapy during the 30-minute group meeting, which the therapist both structured and led. The goals of the clinic were to allay a patient's debilitating interpersonal anxiety with a nonthreatening milieu of acceptance and emotional support and to provide nurturance through warmth and refreshments—all administered within a group setting. At the conclusion of the 30-minute group meeting, each patient was seen individually for approximately five minutes and given his injection, necessary prescriptions, and a return appointment slip. Patients were told to contact the therapist in the interim if necessary.

The room and chair arrangement were the same for the Group B patients, but refreshments were not available and the therapist did not either initiate group interaction or promote interpersonal contact between the patients. The patients were seen individually by the therapist, although they waited as a group in the clinic room prior to being seen. The goals for Group B patients were to provide a nonthreatening, accepting, supportive therapeutic relationship with freedom from the stress of group membership and to provide nurturance in the form of ten to 20 minutes of individual therapy.

RESULTS

Three patients from Group A and two from Group B dropped out, and the study was continued with 19 patients. During the study period, Crisis Clinic visits were reduced to four for both groups and no hospitalizations were required. Furthermore, there was no record that any patient received psychiatric care from other private or public mental health agencies. The patients' responses to the two treatment settings are summarized below.

Attendance

There were seven late arrivals for Group A and 18 for Group B (late arrivals were those who arrived one hour after the scheduled appointment time). There were five unkept appointments for Group A, compared with 31 for Group B. During the 18-week prestudy period, there had been 21 unkept appointments for Group A and 27 for Group B.

In general, the Group A patients tended to arrive on time throughout the study, in contrast to an increasingly erratic attendance record for Group B patients. For the last six sessions, an average of eight Group A patients and three Group B patients arrived on time for their appointments.

Socialization

Very little social interaction occurred in either group during the first two sessions. By the third session, Group A patients began engaging in conversation upon entering the room and became more spontaneous in group interaction. Five of the patients consistently began bringing friends or relatives to the meetings. In addition, by the sixth session they were able to socialize without the encouragement of the therapist and requested that the group meeting be extended from 30 to 45 minutes. On the other hand, the social interaction of Group B patients remained distant, isolated, and nonspontaneous.

Cost Efficiency for Therapist's Hours

The cost efficiency for each group was established by comparing the time required for therapy (including the extension of clinic time for late visits and the rescheduling of appointments), writing letters to patients who did not accept telephone calls, and telephone calls to and from patients. In each of these areas Group B patients required more time than Group A patients.

When budgeting only for the therapist's total hours (at a salary of $4.97 per hour), the total cost of therapy for Group A patients was $216.20, compared to $352.47 for Group B (there were 27.42 hours of additional therapy time for Group B, which cost $136.27). Subtracting the cost of the refreshments ($18.00), there is a cost differential of $118.27 for the two treatment settings. During this study period, there were 87 visits for Group A and 92 for Group B. Using the above figures, the average Group A visit lasted 30 minutes and cost $2.49 for therapy time. The average was 46.2 minutes per visit for Group B patients, at a cost of $3.83 per visit.

DISCUSSION

As Silverstein noted, a high readmission rate for psychiatric outpatients frequently reflects a failure in the delivery of aftercare services (6). Enthusiastic and innovative programs appear to be imperative if the readmission rate is to be kept at low levels and if successful outpatient management and rehabilitation of the mentally ill is to be maintained. To provide services efficiently and economically, any aftercare setting must attempt to adapt itself by careful planning to best meet the individual needs and anxieties of its patients.

In this study, Group A patients received assistance n mastering their interpersonal anxieties by being rewarded for attendance with refreshments and through the facilitory role of the therapist in a relatively nonthreatening social setting. Apparently, the patients had to learn that socialization could be a rewarding rather than a frightening experience before they could be successfully managed as outpatients. The alleviation of countertherapeutic interpersonal anxiety and the offering of nurturance (emotional support and refreshments) within a social setting was instrumental in establishing a therapeutic milieu for the formerly "refractory" Group A patients.

Krebs concluded that attendance can be used to measure the outcome of a community mental health program, the therapeutic relationship, and patient motivation (7). Certainly, the disparity between the attendance records of the two groups reflects the lack of rapport with Group B patients, who continued to miss appointments in spite of repeated telephone contacts by the therapists. Attendance for Group B patients was an anxiety-provoking experience that increased their rate of failure to keep appointments.

Socially, there was a marked change in Group A patients over time, compared with Group B. Group A patients not only continued to arrive on time, but also encouraged friends or relatives to join them. Interaction soon became spontaneous, and socialization was considered a rewarding rather than an anxiety-provoking experience. Conversely, Group B patients did not master their interpersonal anxieties and tended to avoid the clinical setting. The therapeutic role of the group setting (8) and the acceptance and gratification of the patient's oral dependency needs through emotional support and refreshments (9) have been reported previously by other investigators.

May addressed himself to the cost efficiency of five treatment modalities for hospitalized schizophrenics and concluded that the most effective program may also be among the most economical (10). No doubt, effective and economically efficient treatment is also extremely important in the outpatient management of the schizophrenic patient, since the caseloads in many facilities are frequently large. In this study, the saving of 27.42 therapeutic hours for Group A patients was appreciable and the quality of care was also maintained or increased, as measured by patient response. In addition, aggressive use of the telephone helped to reduce expensive readmission to the inpatient unit and also reduced the use of the Crisis Clinic.

The role of the therapist (S.W.K.) along with her professional bias and attitudes were undoubtedly important factors affecting the clinical responses of the patients in the two groups. Although the therapist was the same for both groups and initially felt equally at ease (or anxious) in both groups, she began to realize, after approximately two months, that she preferred working with the Group A patients. The extent to which a happy, comfortable therapist promoted better emotional health and socialization in Group A or the extent to which a responding, improving patient group reinforced the therapist's positive attitude is impossible to assess in this study. Undoubtedly both factors were operating.

Finally, outpatient studies comparing treatment settings and modalities of treatment are difficult to establish methodologically. Few well-controlled studies have been reported. Increasing emphasis on the outpatient management of the mentally ill, including cost efficiency and utilization review, points to the need for further investigation in this area.

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Relapsed Schizophrenics: Earlier Discharge from the Hospital After Cereal-Free, Milk-Free Diet

BY F.C. DOHAN, M.D., AND J.C. GRASBERGER, M.D.

Routinely treated schizophrenics, who on admission were randomly assigned to a diet free of cereal grains and milk while on the locked ward, were discharged from the hospital about twice as rapidly as control patients assigned to a high-cereal diet. Wheat gluten secretly added to the cereal-free diet abolished this effect. These and previous findings suggest that cereal grains may be pathogenic for those hereditarily predisposed to schizophrenia just as they are for celiac disease, a disorder that may be genetically related.

WE HAVE PREVIOUSLY REPORTED that a cereal-free, milk-free diet hastened the improvement of relapsed schizophrenics ($p<.01$) as judged by the duration of their stay on a locked ward (1, 2). This was apparently not due to psychological factors affecting staff or patients, since the effect disappeared when wheat gluten was secretly added to the diet. This suggests that diet is of therapeutic value and that cereal grains may be one of the pathogenic factors affecting those susceptible through heredity to schizophrenia. This hypothesis (3) is further supported by the following:

1. Epidemiologic data demonstrating a strong correlation ($r = 0.96$, $p<.01$) between first admissions for schizophrenia and the consumption of wheat plus rye (2, 3).

2. Observations indicating that celiac disease (gluten enteropathy), which is probably based on polygenic inheritance (4) and is ameliorated by not eating wheat gluten and its analogues in other cereal grains, and schizophrenia, which is probably also polygenic (5), occur in the same individual more frequently than would be expected by chance (2, 6).

3. Data from sizable samples of schizophrenics in the pre-phenothiazine era provided findings similar to those in celiac patients, including gastrointestinal and other symptoms (7–10), metabolic changes (9, 11), failure to gain weight on high-calorie diets (11, 12), and histologic changes in the intestines and mesenteric lymph nodes (10, 13, 14).

4. Reports of frequent psychiatric disturbances in celiac patients, including one instance of hallucination (15, 16), which may rapidly be made manifest by gluten administration (6), show improvement soon after the removal of gluten from the diet (16–18), and in some cases are similar to disturbances seen in schizophrenia (6, 15).

The purpose of our present study was to examine the effect of a cereal grain-free, milk-free diet upon relapsed schizophrenics as measured by another and more commonly used index of improvement than the length of stay on the locked ward, which was the index used in our previous study (1, 2). We now report data that have become available since that time—the length of stay until discharge from the hospital of relapsed schizophrenics who were on the test diets during their stay on the locked ward. We included only those patients readmitted or admitted for the first time to the Coatesville, Pa., Veterans Administration Hospital during our previous study periods (I and II) and during an additional admission period (IIIa). Our previous study included patients transferred to the locked ward from the open wards as well as those assigned to the locked ward on admission to the hospital.

METHOD

All subjects were male veterans. The means and distributions of their ages by experimental groups did not differ significantly. The mean for all subjects was 38 years. The diagnostic criteria were those outlined in the 1952 edition of the American Psychiatric Association's *Diagnostic and Statistical Manual.* Aside from the diet while on the locked ward, all patients were treated routinely during their period on the locked ward and after their release to the open wards. Chlorpromazine and thioridazine were the most frequently administered antischizophrenic medications. After review of their cases at a staff conference, patients who were improved sufficiently or considered likely to experience no further benefit from hospitalization were discharged.

We report here the length of time from admission to discharge from the hospital (within approximately one year after the end of each admission period) for those schizophrenics who entered the locked study ward on the day of their admission to the Coatesville Veterans Administration Hospital as new admissions or as read-

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This work was supported in part by grants from the Benevolent Foundation of Scottish Rite Freemasonry, Northern Jurisdiction, U.S.A., and from the National Association for Mental Health, Inc.

The authors wish to thank Dr. Johannes Ipsen, Professor of Epidemiology and Medical Statistics, Department of Community Medicine, University of Pennsylvania, for his help in statistical analysis.

TABLE 1
The Effect on Discharge from the Hospital of a Diet Free of All Cerea. Grains and Milk (CFMF) Compared with High-Cereal Diet (HC)

Day After Admission	CFMF Diet (N = 59) Cumulative Number Discharged	CFMF Diet (N = 59) Cumulative Percent	HC Diet (N = 56) Cumulative Number Discharged	HC Diet (N = 56) Cumulative Percent	Probability Difference Was Due to Chance* (Percent)
30	6	10.2	2	3.6	15.3
60	17	28.8	7	12.5	2.6
90	22	37.2	9	16.1	0.9
120	24	40.7	12	21.4	2.1
150	26	44.1	12	21.4	0.8
180	27	45.8	15	26.8	2.7
360	30	50.8	22	39.3	14.5

*Fisher's exact method.

missions to it. Only those who remained on the locked ward longer than one day are included in the analysis.

During the three admission periods, all patients who entered the locked ward from either outside or inside the hospital were immediately randomly assigned (initially by odd or even Social Security numbers and later by random numbers in balanced groups of four) to various experimental diets. The experimental diets were provided only during the patients' stay on the locked ward. After release from the locked ward to an open ward (which usually occurred by the 15th day), all patients were subjected to the same diet, i.e., the usual hospital diet. This diet afforded ample opportunity to consume large amounts of cereal grain products and milk.

During period I (175 days) and period IIIa (148 days) patients were randomly assigned either to a diet free of all cereal grain and milk products (CFMF diet) or to the usual milk-containing hospital diet, which was made somewhat higher in cereal grains (e.g., spaghetti instead of potatoes)—the high-cereal diet (HC diet). Milk was omitted from the CFMF diet because it produces a relapse in some celiac patients and thus, we hypothesized, may be harmful to some schizophrenics. During admission period II (143 days) patients were randomly assigned to either the HC diet or to the CFMF diet to which wheat gluten (about 19 gm./day) had been secretly added. This is approximately the amount consumed in breads, cakes, and so forth by the subjects on the HC diet. Strict mealtime and between-meal diet discipline was attempted for all patients during their stay on the locked ward throughout the entire study.

At the end of each admission period the patients were continued on the locked ward diets for a week to ten days, thus providing a "corridor" before the beginning of a new period. Patients admitted during the corridor period were not included in the experiment. Only 11 of the patients in this study were not released from the locked ward to an open ward before the beginning of a new period. All of them had been on either the HC or CFMF plus gluten diet. This is in accord with our previous observation that a CFMF diet is associated with an earlier release from the locked ward. Patients transferred to the medical or surgical wards or to another hospital were not included in this study.

Those schizophrenics who were admitted to the hospital as new admissions or readmissions during each of the admission periods and who were assigned to a particular experimental diet can be considered one cohort. Since we hypothesized that the CFMF diet would be associated with earlier discharge from the hospital and this diet was given during periods I and IIIa, the results from the two cohorts that were assigned to the CFMF diet in these two periods were combined for analysis, as were the results from the two HC cohorts.

RESULTS

Table 1 demonstrates that the proportion of relapsed schizophrenics in the CFMF diet group who were discharged from the hospital during the first six months was considerably and significantly greater than that in the HC group. In contrast, table 2 shows that when gluten was secretly added to the CFMF diet this difference did not occur.

CFMF Diet Versus HC Diet

The significance of the differences in the cumulative proportions of the 59 CFMF schizophrenics and the 56 HC schizophrenics discharged from the hospital at successive ten-day intervals after admission was analyzed by Fisher's exact method. Table 1 shows the results at 30-day intervals. The cumulative percentage discharged of the CFMF group at the end of each ten-day interval from day 40 through day 190 was significantly greater than that of the HC group. The probability that the differences between the two groups was due to chance alone was less than three percent in 13 of the 16 comparisons. On days 90, 150, and 160 the probability was less than one percent. Thus, it seems unlikely that the more rapid discharge of the CFMF group was due to chance alone.

The increased rate of discharge occurred during the

TABLE 2

The Effect on Discharge from the Hospital of Adding Wheat Gluten to the Diet Free of All Cereal Grains and Milk (CFMF) Compared with High-Cereal Diet (HC)

Day After Admission	CFMF + Gluten Diet (N = 17)		HC Diet (N = 25)		Probability Difference Was Due to Chance* (Percent)
	Cumulative Number Discharged	Cumulative Percent	Cumulative Number Discharged	Cumulative Percent	
30	0	—	1	4.0	59.5
60	2	11.8	2	8.0	53.8
90	4	23.5	3	12.0	28.4
120	4	23.5	5	20.0	53.7
150	5	29.4	6	24.0	48.2
180	6	35.3	7	28.0	43.3
360	6	35.3	8	32.0	54.1

*Fisher's exact method.

first 90 days after admission. The cumulative proportion discharged at the end of 90 days after admission was 37.2 percent for the CFMF group, compared with 16.1 percent for the HC group. Furthermore, of the number in each diet group who were in the hospital on days 0, 30, and 60, the proportion discharged in the following 30 days was 10.2, 20.8, and 11.9 percent for the CFMF group and 3.6, 9.3, and 4.1 percent for the HC group; that is, the absolute discharge rate of the CFMF group for each of the three 30-day intervals was more than twice that of the HC group. However, after that time the percentage of the remainder discharged was about the same for both groups.

Considering only those patients discharged from the hospital, the median day of discharge for both groups combined was day 65; the median day (interpolated) was day 102 for the HC group and day 53 for the CFMF group. The average time until discharge for the discharged CFMF patients (77 days) was 55 percent of that of the discharged HC patients (139 days).

Only one patient was admitted to the hospital twice, each time on a different diet. When randomly assigned to the HC diet he remained on the locked ward for 17 days and left the hospital without permission (AWOL) on day 65. When he was readmitted 11 months later and randomly assigned to the CFMF diet he stayed seven days on the locked ward and was discharged on day 22.

Of the 22 HC patients who were later discharged, 10 were returned to the locked ward one to six times because of their behavior on the open ward. Of these, three were then randomly assigned to the CFMF diet. They were discharged 21, 78, and 87 days later, all in less than the median time to discharge (102 days) for the HC group. Of the 30 discharged schizophrenics in the CFMF group, only three reentered the locked ward (one or two times), all on the CFMF diet.

CFMF Plus Gluten Diet Versus HC Diet

Analysis by Fisher's exact method at ten-day intervals of the cumulative proportions discharged from the CFMF plus gluten group versus the HC group showed that the lowest probability that the differences were due to chance alone was 28.4 percent and that all other values except one were greater than 40 percent. Thus, as is shown in table 2, there was no significant difference in the rate of discharge between the HC group and the CFMF group when gluten was secretly added to the CFMF diet.

DISCUSSION

During the first 90 days after admission to the hospital, those schizophrenics assigned to the CFMF diet were discharged more than twice as fast as those in the HC control group. After that period the rates became similar. We suggest this might be because the subjects were on the CFMF diet only during the time they were on the locked ward (prior to their release to an open ward), which for 76 percent of the entire CFMF group was no more than 15 days. Thus, any therapeutic effect of this brief period on the CFMF diet may have lasted for only a few months after resumption of the normal hospital diet. It is also possible that only a proportion of those diagnosed as schizophrenic respond to a CFMF diet.

We have previously observed (1, 2) that the effect of the CFMF diet on improvement of relapsed schizophrenics was most prominent within the first week or two. The effect on the discharge rate occurred in the first three months. Perhaps a longer period on the CFMF diet would have extended this effect. The psychological symptoms of celiac (gluten enteropathy) patients also usually improve considerably within a week or two, often within a few days (16–18), when they are placed on a "gluten-free" diet (i.e., omitting foods made from wheat, rye, barley, and sometimes oats). The symptoms often but not always recur in weeks to years after resuming the usual gluten-containing diet. However, we are unaware of reports of sustained improvement of celiac patients after a period as short as the two to ten days of this diet experienced by 24 (80 percent) of the 30 discharged CFMF schizophrenics.

Many observers state that celiac patients, after being

on a gluten-free diet, find they can eat gluten-containing food for weeks to years with no (or only minor) subjective symptoms prior to clinical relapse. Unfortunately, the length of time from starting a gluten-free diet to the development of tolerance to gluten and its analogues has not been well studied. Cooke and his co-workers (19) in a report on 50 celiac patients noted that 25 of them were eating foods containing gluten, seven of them without any treatment whatsoever after the initial treatment period. They noted, as have others, that after the initial treatment, apart from the intestinal biopsy findings of mucosal atrophy, there was surprisingly little difference between celiac patients who were on a gluten-free diet and those who were not. It is customary, nevertheless, to recommend that the gluten-free diet be maintained for many years. The clinical reports that "psychic stress" often precedes relapse and the careful observation of Grant that relapses in celiac patients tolerating gluten occurred when the life situation was such that the patient "gave up" (20) are of considerable interest in view of the probable role of psychic factors in the relapse of schizophrenics.

In contrast to the beneficial effects of the CFMF diet, the relapsed schizophrenics on the CFMF diet to which wheat gluten was added (without the knowledge of staff or patients) were not discharged from the hospital significantly faster than their temporal controls on the HC diet. This finding suggests that the effect of the CFMF diet on the discharge rate was not due to any bias of the patients or staff. During this period there was also no difference in the rate of release from the locked ward of the HC and CFMF plus gluten groups composed of schizophrenics entering the locked ward from open wards or as new admissions to the hospital (1, 2).

These adverse effects on relapsed schizophrenics of gluten added to the CFMF diet indicate that, as in celiac disease, "toxicity" is associated with the gluten fraction of wheat. However, epidemiologic data indicate that schizophrenia occurs, although possibly with lesser frequency, in societies that eat no wheat or rye but do eat other cereal grains (3) such as maize and millets, which contain gluten-like proteins but with a lesser proportion of glutamic acid, glutamine, and proline.

CONCLUSIONS

We believe that the beneficial effect of the cereal grain-free, milk-free diet on discharge rates adds strong support to the hypothesis that cereal grains may be involved in the pathogenesis of schizophrenia (1–3, 6, 15) as well as in celiac disease. We therefore suggest that the effects of this diet on acute new or recently relapsed schizophrenics deserve careful testing by other investigators. If the effect of diet on persistently chronic schizophrenics is to be tested we suggest the diet be continued for at least six months to a year. The examination of unmedicated active schizophrenics, who have been on a high gluten-containing diet for weeks or months, by the same techniques used in studying celiac disease (in particular, peroral intestinal biopsy) should be fruitful, as should an investigation of the possibility that one or more genes may be common to the two diseases.

The annual direct plus indirect cost of schizophrenia in the United States for the two to three million Americans carrying this diagnosis was recently estimated as approximately 14 billion dollars (21). If diet proves to be an effective long-term therapeutic adjunct, as our preliminary short-term experiments and epidemiologic observations lead us to postulate, the tremendous human burden and financial costs of this relatively common disorder should be substantially decreased.

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Mesoridazine Versus Chlorpromazine in Acute Schizophrenia: A Double-Blind Investigation

BY T.A. HAMID, M.D., AND WILLIAM J. WERTZ, M.D.

A double-blind comparison of mesoridazine and chlorpromazine with 91 newly admitted, acutely psychotic patients showed that symptoms grouped in the following composites improved significantly more in the mesoridazine patients than in the chlorpromazine patients: motor activity, attitude and behavior, emotional response, and ideation and thought processes. The mesoridazine patients experienced less sedation than the chlorpromazine patients.

EMOTIONALLY DISTURBED PATIENTS admitted to a hospital emergency room are frequently delusional, combative, assaultive, agitated, hostile, hallucinating, incoherent, and generally uncontrollable. In many hospitals, particularly overcrowded urban ones, emergency room psychiatric procedures are intended merely to bring the patient's gross symptoms under control. While awaiting either release from the hospital or transfer to a psychiatric ward, the institution of psychotherapeutic measures may be delayed, often by several days.

Many psychiatric treatment centers and hospitals are assessing the situation from within. One group, as reported by Rhine and Mayerson (1), has implemented a coordinated crisis program for both inpatients and outpatients. Under this program, experienced psychiatrists and other specialized personnel have replaced resident doctors in the psychiatric emergency rooms. Admission to an emergency room and subsequent treatment is considered the start of therapy rather than an end in itself.

With a shift in emphasis from mere patient "disposition" or "parking" to early therapeutic programs, modifications in drug requirements should be considered. Traditionally, a patient in an emergency ward who presents severe psychotic symptoms is given parenteral injections of one of the phenothiazines. Patients generally become heavily sedated, which is not conducive to the early implementation of combined treatment consisting of chemotherapy, psychotherapy, and supportive therapy. It would be preferable to find an agent that can rapidly control acute psychotic manifestations yet render the patient receptive to early therapy.

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The present study compared two chemically different phenothiazine derivatives, mesoridazine (a piperidine) and chlorpromazine (an aliphatic). The purpose of the study was to determine the efficacy and safety of the compounds in controlling psychotic symptoms during a 24-hour period. Emphasis was placed on determining the type of symptoms that would respond and the degree of sedation that would occur with each treatment during the 24-hour period.

METHOD

Patients selected for the study presented a clinical picture consistent with schizophrenia. After the patients had received a medical and psychiatric examination and their related histories were obtained, they were considered for inclusion in the study if they exhibited acute psychotic symptoms sufficiently severe to warrant the parenteral administration of a neuroleptic. Patients exhibiting mental deficiency, acute or chronic alcoholism, drug addiction, epilepsy, or organic brain syndrome were automatically excluded. Pregnancy, severe central nervous system depression, and a hypersensitivity to phenothiazines also constituted reasons for exclusion. Patients who had received a neuroleptic or antidepressant during the two weeks prior to admission were excluded from the study, as were patients who had received a minor tranquilizer within three days of the study.

Ninety-one patients who participated in the study were assigned medication according to a randomized design that provided two treatment groups. One group of 47 patients consisted of 21 women and 26 men whose mean age was 36.1 years (range: 16–71 years) and who had previous hospitalizations averaging 16.4 months (range: 0–132 months). This group was treated with mesoridazine. The other group of 44 patients consisted of 20 women and 24 men whose mean age was 34.5 years (range: 18–65 years) and who had previous hospitalizations averaging 19.1 months (range: 0–192 months). This group was treated with chlorpromazine. A chi-square analysis performed at the conclusion of the study confirmed that the groups were homogeneous with respect to sex, height, weight, and diagnosis.

It was not possible to prepare identical ampules of mesoridazine and chlorpromazine. Therefore, to preserve the double-blind aspect of the study, the functions of drug administration and patient evaluation were completely separate. The physician conducted the assessments and

specified all dosage adjustments. The drugs were administered by a registered nurse. The double-blind aspect was well preserved, in that at no time was the physician aware of what drug was administered.

Each patient received an initial injection of 1 cc. (25 mg./cc.) of either drug by deep intramuscular injection, according to the manufacturer's recommendation. Patients received an additional 1 cc. of their assigned treatment drug one hour later. Following the administration of the second 1 cc. of each drug, patients were evaluated for the degree of sedation, in order to assess the sedation effects of equal amounts of the two drugs. Thereafter, the physician could prescribe additional injections every four hours when necessary, up to a 24-hour maximum of 400 mg. of chlorpromazine or 200 mg. of mesoridazine. After the first two doses, the physician ordered dosages of medication as though he were prescribing only chlorpromazine. The nurse carried out the instructions for patients taking mesoridazine with the aid of an equivalency chart that listed dosages in a 2:1 ratio of chlorpromazine to mesoridazine.

No other tranquilizers, neuroleptics, or antidepressants were permitted during the study. Antiparkinsonian drugs were not employed. Further, antihypertensive agents such as reserpine or pargyline were prohibited because of their psychoactivity. Supportive medications considered necessary for the patient's welfare were permitted; these were described in the case record.

The patients' progress was assessed during the study with the aid of three formal rating scales. Symptomatic changes were measured using a Specified Symptom Rating Scale (2). This assessment consists of nine major symptom composites with the headings: Motor Activity, Attitude and Behavior, Emotional Response, Ideation and Thought Processes, Perception, Sensorium, Orientation, Memory, and Somatic Manifestations. A total of 78 symptoms was included in these composites, and each was rated prior to treatment and again after two and 24 hours. Scoring was based on a scale from 1 to 4, in which higher scores corresponded to greater symptom severity. Each patient's composite score was determined by summing the scores for each of the individual items comprising the composite and then dividing that by the number of "target symptom" items in the composite for that patient.

A rating was also conducted at two and at 24 hours to observe the extent to which the degree of sedation contributed to the drugs' therapeutic effects. The physician made this rating by judging to what degree the action of the drug was manifested by sedation. An effort was also made to distinguish sedation from excessive drowsiness, which was rated in the symptom composite of Sensorium and which included the components of clouding, degree of drowsiness, and stupor. Drowsiness was considered excessive if it interfered with hospital procedures or the patient's participation in treatment.

Global improvement was evaluated for each patient at the conclusion of the 24-hour observation period. The incidence and severity of any adverse effects were also recorded at this time.

Change scores were obtained for each symptom and for each composite of the Specified Symptom Rating Scale by subtracting the differences between the baseline value and the two- and 24-hour assessments. The Student t test was used to determine whether the mean change score at each of the specified observation periods was significantly different from baseline. In order to eliminate differences in pretreatment scores as a possible confounding factor in making the drug comparison, an analysis of covariance (3) analogue to Student's t test was used. If the assumptions requisite to this procedure were not met, a simple Student's t test was run to compare the mean change scores for the two agents. Various contingency table analyses were undertaken to test relative differences in global evaluation and the relationships between sedation and drowsiness.

RESULTS

Mesoridazine and chlorpromazine were employed in a range of dosages for the 24-hour study period. Numerous patients in each group received the maximum permissible dosage. The mean 24-hour dose of mesoridazine was 148 mg. (range: 88–200 mg.) and that of chlorpromazine was 215 mg. (range: 50–400 mg.).

The comparison of the treatment effects on the symptom composites after two and 24 hours appears in table 1. After two hours, at the recommended dosages, mesoridazine provided slightly more control of symptoms than did chlorpromazine. After 24 hours, by contrast, mesoridazine was significantly favored ($p < .01$) over chlorpromazine in reducing the severity of the symptoms measured in the following composites: Motor Activity, Attitude and Behavior, Emotional Response, and Ideation and Thought Processes. These composites consisted of the symptoms that occurred with the greatest frequency and severity before treatment. The average pretreatment scores for symptoms in these composites were similar for both treatment groups, in that they ranged from 2.8 to 3.3, scores that represent moderate severity. In the mesoridazine group, average symptom severity was reduced from moderately severe to mild, while many symptoms in the chlorpromazine group remained moderately severe, particularly those included in the Emotional Response category.

Individual symptoms within the composites were analyzed by the t test and analysis of covariance when there were at least 16 patients manifesting the symptom before treatment. After two hours the majority of symptoms were significantly reduced from the baseline, but there were no differences between the relative effects of mesoridazine and chlorpromazine. However, as is consistent with the results for the composites, mesoridazine provided significantly greater symptom remission than chlorpromazine at 24 hours. Two symptom clusters were particularly responsive to mesoridazine. Within the composite for Attitude and Behavior, aggressiveness, assertiveness, resistiveness, and unpredictability were reduced by an average of two rating levels, from severe to mild. In

TABLE 1
Comparison of Treatment Effects of Mesoridazine and Chlorpromazine

Symptom Composite	Mean Change*				Mean Difference Between Drugs			
	Mesoridazine		Chlorpromazine					
	After Two Hours	After 24 Hours	After Two Hours	After 24 Hours	At Two Hours	Drug Favored	At 24 Hours	Drug Favored
Motor Activity	1.11	1.38	0.94	0.98	0.17	M**	0.40***	M
Attitude and Behavior	1.20	1.65	1.01	1.11	0.18	M	0.54***	M
Emotional Response	0.75	1.08	0.57	0.66	0.18	M	0.42***	M
Ideation and Thought Process	0.99	1.54	0.89	1.13	0.10	M	0.41***	M
Perception†	1.05	1.52	1.10	1.20	0.05	C	0.32	M
Sensorium†	-1.35	-0.60	-1.96	-0.94	0.61††	M	0.34	M
Orientation†	2.00	2.00	0.25	1.00	1.75***	M	1.00	M
Memory	0	0.80	—	—	—	—	—	—
Somatic Manifestations	-2.00	0	-1.33	-1.00	0.67	C	1.00	M

*Minus sign indicates worsening.
**M = mesoridazine, C = chlorpromazine.
***$p<.01$.
†The data failed to meet the required assumptions for analysis of covariance.
††$p < .05$.

the composite for Ideation and Thought Processes, mesoridazine demonstrated a marked control of autism, ambivalence of thought, irrelevance, and looseness. Mesoridazine was also superior to chlorpromazine in controlling impulsiveness (Motor Activity) and hostility and inappropriateness (Emotional Response). There were no symptoms for which chlorpromazine was more effective than mesoridazine.

While the above analyses dealt exclusively with average scores, another dimension of the relative drug effects was reflected in the number of patients rendered symptom-free by either treatment. Agitation, impulsiveness, assertiveness, combativeness, unpredictability, ambivalence of thought, and irrelevance were all completely remitted, as rated, in significantly more of the patients treated with mesoridazine. Mesoridazine also controlled symptoms of hyperactivity, verbosity, aggressiveness, assaultiveness, resistiveness, inappropriateness, suspiciousness, and hallucinations in a considerable number of patients.

The physician's impressions, as expressed in the global ratings, corroborated the findings of symptomatic improvement. Measured on a four-point scale ranging from 1 = very much improved to 4 = worse, 42 percent of the mesoridazine patients were very much improved; only ten percent of the chlorpromazine patients were considered very much improved. Fifty-one percent of the mesoridazine patients and 64 percent of the chlorpromazine patients were improved. The remaining patients showed no change; none worsened.

The ratings for Sensorium revealed that after two hours both treatment groups were significantly more drowsy than they had been before treatment. However, patients treated with mesoridazine had significantly less drowsiness than those treated with chlorpromazine. After 24 hours, patients in both treatment groups were less drowsy than they had been at two hours. Although patients treated with mesoridazine were somewhat less drowsy than those treated with chlorpromazine at the end of 24 hours, the difference between the two groups was not significant.

Ratings made for sedation revealed that the effects of mesoridazine were less frequently accompanied by sedation than were those of chlorpromazine. Consistently fewer patients treated with mesoridazine were sedated after two and 24 hours.

Only three side effects were observed during the study. One 23-year-old woman suffered a generalized epileptic seizure after 50 mg. of mesoridazine. Following an identical dose of chlorpromazine, a 48-year-old woman exhibited involuntary movements and a 49-year-old man suffered shock and prostration.

DISCUSSION

The effectiveness of mesoridazine as compared with chlorpromazine has been demonstrated in long-term studies of psychotic patients (4–9). In those studies, mesoridazine alleviated many of the manifestations of schizophrenia but appeared to be particularly effective in the area of thought disorders (conceptual disorganization, hallucinatory behavior, and unusual thought content). The results of the present investigation confirm the symptomatic improvement observed in long-term studies and show that the onset of mesoridazine's activity can be observed even on the first day of treatment. This rapid onset of action makes mesoridazine valuable in the treatment of psychiatric emergencies.

The effectiveness of mesoridazine administered parenterally in emergency situations has been observed by other investigators. Ast and associates (8) treated acute psychotic patients and found they improved markedly, particularly in hallucinatory behavior. Brauzer and Gold-

stein (9) likewise found that mesoridazine improved the psychological state of psychotic patients during their first 72 hours of hospitalization. These patients' conceptual disorganization responded better to mesoridazine than to chlorpromazine.

In this study, the effects of mesoridazine could be distinguished from those of chlorpromazine in several areas. By the end of 24 hours, mesoridazine had produced greater improvement than chlorpromazine in all the symptom composites of observed symptoms. The improvement was significantly greater for the composites indicative of disturbances in Motor Activity, Attitude and Behavior, Emotional Response, and Ideation and Thought Processes. Moreover, the therapeutic effect of mesoridazine in these and other composites was manifested with less sedation and less effect on the sensorium than occurred with chlorpromazine. Mesoridazine, therefore, proved to be a valuable agent for emergency psychiatric treatment because it provided excellent control of symptoms, yet allowed patients to be alert, accessible, and responsive to therapeutic and custodial procedures. Specific treatment rather than mere short-term control could begin on the first day.

CONCLUSIONS

Ninety-one newly admitted schizophrenic patients were selected to participate in a controlled double-blind comparison of mesoridazine and chlorpromazine. The drugs were compared after two and 24 hours with respect to their ability to control acute symptoms grouped in nine composites. Each drug was initially administered intramuscularly in a 25-mg. dose that was repeated in one hour. Thereafter, dosages were prescribed according to individual need, not to exceed 200 mg. of mesoridazine or 400 mg. of chlorpromazine in the 24-hour period.

Patients treated with either mesoridazine or chlorpromazine experienced relief of symptoms after two and 24 hours. However, after 24 hours, differences between treatment significantly favored patients treated with mesoridazine for the composites of Motor Activity, Attitude and Behavior, Emotional Response, and Ideation and Thought Processes. The therapeutic effects of mesoridazine were manifested with less sedation than occurred with chlorpromazine. As a result, patients who received mesoridazine were more accessible and responsive to the therapeutic, diagnostic, and custodial procedures associated with their early treatment.

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EDITORIAL

The Treatment of Schizophrenia: Illusion or Elusion?

SHORTLY BEFORE THE TURN OF THE CENTURY the famed pathologist Rudolph Virchow was asked for a definition of cancer. He responded that he would not attempt such a definition even under the threat of torture. His very sensible position is equally applicable to schizophrenia. It is such a highly complex and multivariate disorder that our attempts to conceptualize it adequately have repeatedly resulted in disappointment. Inadequate conceptualization produces diagnostic unreliability. It is well known that nosologic irrelevancies such as the psychiatrist's geographic locale, theoretical preference, and general experience determine his diagnostic practices.

Despite this diagnostic disorder there are certain points of general agreement. Schizophrenia can be seen both as a process and as a clinical syndrome. From the former point of view, it is the progressive development over time of a psychotic condition from a nonpsychotic premorbid state. The latter and more common usage is as a label for a clinical syndrome that can be defined by the presence of certain specifiable signs and symptoms. In a very real sense, the schizophrenic syndrome is anything we wish it to be. The unfortunate problem is that psychiatrists in fact differ sharply in what they wish it to be. Highly personal if not autistic definitions abound. This is not because of the poor reliability of the individual diagnostic criteria, but rather because of individual differences in willingness to attach the label. The remarkable point is that a group of psychiatrists who show very high agreement on which diagnostic signs are present or absent will then differ sharply in the diagnosis they make on the basis of those signs. This paradox gives us an important insight into the problem of schizophrenia. Seriously disturbed patients evoke in the psychiatrist a variety of unpleasant feelings that influence his willingness and ability to make an accurate diagnostic statement. It is not unfair to conclude that the psychiatrist, when faced by madness, also binds his anxiety in peculiar ways.

If the psychiatrist finds schizophrenia difficult to comprehend and diagnose, we should expect him to find it more difficult to treat. This is in fact the case. Some psychiatrists limit or even exclude patients from their practices because they do not find treatment to be a personally satisfying experience. A heterogeneous category consisting of several populations, each of which is highly variable, produces a therapeutic nightmare. The result is a variety of "preferred" treatments, ranging from the biologic to the psychologic. What the treatments lack in efficacy their advocates often make up in vehemence. One can reasonably raise a question concerning the rationale for any exclusive treatment when there is so much diagnostic heterogeneity in the patient

In this section, the Editor samples varied opinions on topical problems. The opinions expressed herein are not necessarily those of the Editor, nor can they in any way be construed as marking the official policy of the Journal.

sample. It seems of doubtful validity to speak of the "treatment of choice" in a condition that varies greatly in its premorbid picture, onset, presenting signs, course, and outcome. Clearly, it is this very ambiguity which permits passionate partisan positions. There would be no room for such affective displays if we had more knowledge.

Once we recognize the problem of diagnostic heterogeneity there are several courses available. The most obvious is to reduce the heterogeneity through all available means. During the interim, we must recognize that the heterogeneity exists and therefore no single treatment modality can be the best. In a syndrome as variable as schizophrenia, we should expect virtually any specifiable intervention to be useful in some subset of the total population. The variation in the individual patient over time can also be so great that the treatment approach which is best suited at one point is less well suited at another. We can conclude that we must have a range of treatments that approximates the variability of the syndrome. There need not be a correspondence between the type of intervention and the etiology. In other words, it is not necessary to administer a biochemical intervention for the genetic contribution and a psychologic intervention for the effects of the environment. The syndrome is the end product of a genetic-environmental interaction and can be influenced to varying degrees by both chemical and social means.

The individual who wishes to treat schizophrenic patients cannot be bound by the shackles of orthodox theory. He must be flexible and willing to try a variety of interventions in a variety of ways. At times drugs may be helpful and at other times harmful. Interpretations of unconscious material may be contraindicated at certain phases of treatment and very helpful at others. The therapist must be eclectic, practical, and infinitely patient. He has to be willing to assume a greater degree of responsibility than is usually necessary in the treatment of less seriously disturbed patients. He must also recognize the important role of individual differences among therapists so as to find treatment methods that are effective for him. Ultimately, we have to be able to specify which therapeutic interventions alone or combined produce what specific changes in which specific patients under which specific conditions. Until we can do this, the treatment of schizophrenia remains at its best an intuitive art and at its worst a standardized obtunding of fellow human beings.

ROBERT CANCRO, M.D.

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Norepinephrine Metabolites as Biochemical Criteria for Classifying Depressive Disorders and Predicting Responses to Treatment: Preliminary Findings

BY JOSEPH J. SCHILDKRAUT, M.D.

Preliminary findings suggest that levels of norepinephrine metabolites, particularly 3-methoxy-4-hydroxyphenylglycol (MHPG), excreted in urine may provide biochemical criteria for classifying at least some types of depressive disorders and possibly also for predicting the differential responses to treatment with various tricyclic antidepressant drugs.

THE POSSIBILITY that some depressions are associated with an absolute or relative deficiency of catecholamines, particularly norepinephrine, at functionally important receptor sites has been proposed on the basis of findings from basic as well as clinical neuropharmacological investigations (1–3). The validity of this hypothesis, however, remains to be definitively established. Several different biochemical mechanisms (e.g., a decrease in the output of norepinephrine from presynaptic neurons, an increase in the inactivation of norepinephrine, or a decrease in the sensitivity of postsynaptic receptors to norepinephrine) could conceivably cause the proposed deficiency of norepinephrine at receptor sites. Furthermore, it has been suggested that these different biochemical mechanisms might lead to differences in both clinical phenomenology and responses to pharmacotherapy (1, 4, 5).

This paper now reports preliminary findings that indicate that some depressed patients excrete relatively low levels of norepinephrine metabolites in the urine, whereas certain others excrete much higher levels. The findings, moreover, suggest that this may be a basis both for classifying at least some types of depressive disorders biochemically and possibly also for predicting the clinical response to treatment with the tricyclic antidepressant amitriptyline.

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This work was supported in part by Public Health Service grant MH-15413 from the National Institute of Mental Health and by a grant from Merck Sharp & Dohme.

The author wishes to thank Paul R. Draskoczy, M.D., Peter Reich, M.D., Elliot S. Gershon, M.D., and Peter Wohlauer, M.D., for their collaboration in aspects of this work; and Edwin L. Grab, Pallas S. Lo, Patricia A. Platz, Carol R. Hicks, Barbara A. Keeler, Karen Bozogan, Gladys Rege, and the clinical staff of Service One for their assistance.

METHOD

Six patients, hospitalized for the treatment of depressive disorders, were studied longitudinally during the course of their illnesses. Depressions were classified according to clinical criteria described elsewhere (3). The question of a possible manic-depressive disorder was raised in two of the patients (U.R. and B.O.) because of hypomanic or manic episodes that occurred during the administration of antidepressant drugs or electroconvulsive treatments. Each patient's clinical state was assessed at least once a week by means of the Hamilton Depression Rating Scale (6) and the Mania-Depression Rating Scale (7).

Patients were not treated with psychoactive drugs for at least one week prior to beginning the collection of pretreatment data and during the pretreatment data periods. Following this period, treatment with amitriptyline was begun. A dosage of at least 75 mg. per day was attained in the first week and this was subsequently increased to at least 200 mg. per day for those patients who did not show a sustained response at lower doses. All patients participated in a program of interpersonal treatment throughout their hospitalization. Chloral hydrate (500 mg. per night) was administered for sleep to two patients (B.L.; S.G. for one night only).

Urine samples were regularly collected for 24-hour periods throughout the course of hospitalization. Levels of norepinephrine and epinephrine (8), normetanephrine (NMN) and metanephrine (9), 3-methoxy-4-hydroxymandelic acid (VMA) (10), 3-methoxy-4-hydroxyphen-

TABLE 1

Excretion of Norepinephrine Metabolites: Possible Biochemical Criteria for Classifying the Depressive Disorders

Patient	Sex	Age	Diagnosis	Pretreatment Hamilton Depression Ratings		Norepinephrine and Its Metabolites (μg.					
						Norepinephrine		Normetanephrine		VMA	
				N**	Mean***	N**	Mean***	N**	Mean***	N**	Mean***
E.S.	M	28	Manic-depressive	7	28±2	4	4±1	4	90±20	4	2660±50
K.F.	F	18	Manic-depressive	1	23	2	16±2	2	110±20	2	2020±380
U.R.	F	44	Involutional; possibly manic-depressive	3	32±2	3	28±2	3	140±3	3	3540±160
B.O.	F	62	Involutional (paranoid); possibly manic-depressive	4	38±2	8	48±8	8	580±120	8	6750±960
B.L.	F	67	Involutional or chronic characterological	3	42±1	6	24±2	6	330±20	5	5540±510
S.G.	F	50	Involutional or chronic characterological	2	44±4	3	67±15	2	350±20	3	4830±360

*Total = norepinephrine, normetanephrine, VMA, and MHPG.
**N = number of clinical ratings or urine samples comprising each mean.
***Mean ± standard error of the means.
†Time in weeks to 50 percent decrease in Hamilton Depression Rating Scale scores.
††Decrease in depression sustained for at least six weeks.

ylglycol (MHPG) (11), and creatinine (12) were all determined by modifications of previously described methods. Student's t test was used to determine the statistical significance of differences.

RESULTS

The pretreatment levels of norepinephrine and its metabolites NMN, VMA, and MHPG (expressed in micrograms per gram of creatinine) are presented in table 1. The levels of NMN, VMA, and MHPG were relatively low in three of these patients (E.S., K.F., and U.R.) and considerably higher in the other three (B.O., B.L., and S.G.). The differences in NMN levels were similar in magnitude to the differences we observed in an earlier study (13). The levels of epinephrine and its O-methylated metabolite metanephrine (which may also be converted to VMA and MHPG), did not show such marked differences among patients and did not appear to be related to the levels of the norepinephrine metabolites. The total excretion of norepinephrine and its metabolites showed a perfect correlation with age (see table 1).

Amitriptyline did not produce a sustained antidepressant effect (defined as a 50 percent or greater decrease in Hamilton Depression Rating Scale scores from pretreatment values that was maintained for at least six weeks) in any of the three patients with relatively low pretreatment levels of norepinephrine metabolites, although two of these patients (K.F. and U.R.) showed marked but transient improvements. (The transient improvements observed in patients K.F. and U.R. lasted for only two and five weeks, respectively, despite the continued administration of amitriptyline.) In contrast, all three of the patients with high pretreatment levels of norepinephrine metabolites showed rapid and sustained decreases in depression during treatment with amitriptyline (see table 1). Although a 50 percent decrease in the Hamilton Depression ratings was the criterion for improvement in this study, these three patients all showed considerably greater (i.e., 70 to 95 percent) decreases in their depression ratings.

VMA excretion was markedly decreased during treatment with amitriptyline (when compared with pretreatment levels) in all three patients with high pretreatment levels of norepinephrine metabolites, i.e., the three patients who showed rapid and sustained antidepressant effects (S.G., B.L., and B.O.). These differences were statistically significant ($p < .05$) in two of the patients (B.L. and B.O.) and approached significance ($p < .10$) in the third (S.G.). In contrast, significant decreases in VMA excretion were not observed during treatment with amitriptyline in the three patients with low pretreatment levels of norepinephrine metabolites, i.e., the three patients who did not show rapid and sustained antidepressant effects (U.R., K.F., and E.S.); see figure 1.

DISCUSSION

The present findings suggest that some depressed patients excrete relatively low levels of MHPG [1] and other norepinephrine metabolites in urine, whereas others excrete much higher levels. The low levels of norepinephrine metabolites observed in two of the patients (E.S. and K.F.) in this study suggest a decrease in both the synthesis of norepinephrine and its net output from

[1] MHPG is the urinary metabolite of norepinephrine that may provide the best available index of the synthesis and metabolism of norepinephrine (and normetanephrine) in the brain (14–16); however, MHPG may also be derived from norepinephrine originating in peripheral sympathetic nerves.

per Gram of Creatinine)

MHPG		Total*		Response to Amitriptyline	
N**	Mean***	N**	Mean*	Time†	Sustained††
4	530±80	4	3280±100	22	No
2	710±140	2	2860±220	4	No
3	1140±40	3	4840±200	2	No
7	2240±200	7	8670±770	2	Yes
7	3190±230	5	8890±520	2	Yes
3	1590±210	2	6330±500	2	Yes

presynaptic neurons; a decrease in the neuronal discharge or an increase in the neuronal reuptake of norepinephrine would be compatible with these findings. The higher levels of norepinephrine metabolites observed in three of the patients (B.O., B.L., and S.G.) would be consistent with an increase in the enzymatic inactivation of norepinephrine or a deficiency in postsynaptic receptor sensitivity to norepinephrine that is partially compensated by an increase in the output of norepinephrine from presynaptic neurons; findings supporting each of these possibilities have been reported (17–19).

The two patients (E.S. and K.F.) with the lowest levels of MHPG and other norepinephrine metabolites had unequivocal diagnoses of manic-depressive depressions, i.e., bipolar disorders, whereas much higher levels were observed in the two patients (B.L. and S.G.) who had diagnoses of involutional or chronic characterological depressions. The highest levels of NMN and VMA occurred in the patient with an involutional depression (B.O.) who was overtly psychotic (paranoid); this is consistent with previous findings (9, 20). While the levels of norepinephrine metabolites appeared to bear some relationship to clinical diagnoses and phenomenology, this association is an imperfect one.

The total excretion of norepinephrine and its metabolites showed a perfect correlation with age in this series. In view of the small sample size, it is possible that this may have been a chance occurrence; however, other investigators have reported a positive correlation between normetanephrine excretion and age in psychiatric patients (21). It is, therefore, of some interest that the three patients who had the highest levels of norepinephrine metabolites and rapid and sustained responses during treatment with amitriptyline were older than the three patients who had lower levels and who did not show sustained responses to amitriptyline, particularly since it has been reported that amitriptyline is more effective than imipramine in depressed patients over 50 years of age (22) and that the activity of monoamine oxidase in human brain and peripheral tissues increases with age (23).

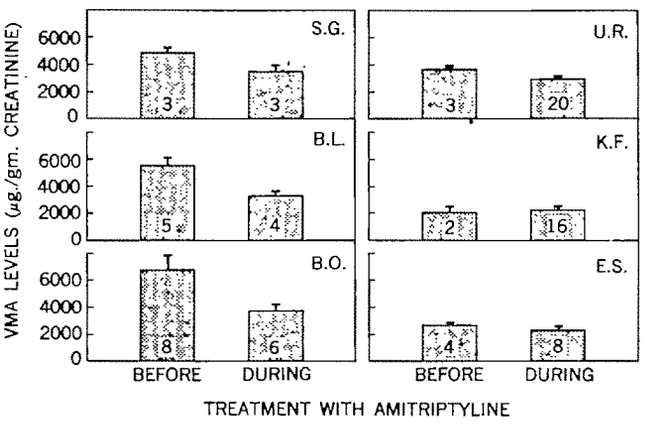
The present results show that amitriptyline decreased VMA excretion in the patients with high pretreatment levels of norepinephrine metabolites. In previous longitudinal studies of depressed patients, we found that VMA excretion was decreased during treatment with imipramine as well as with phenelzine (a monoamine oxidase inhibitor) (9, 24), and this finding has been confirmed by other investigators (19, 25, 26). Tricyclic antidepressants, including imipramine and amitriptyline, decrease the deamination of norepinephrine in animal brain (27–29), and the decrease in VMA excretion observed in patients during treatment with these drugs may similarly reflect a decrease in the deamination of norepinephrine by monoamine oxidase (9, 24, 30).

Further studies on a larger sample of patients will be needed to confirm these preliminary findings which indicate that there may be differences in the clinical and biochemical effects of amitriptyline in patients with low and high levels of norepinephrine metabolites. While one possibility, based on recent neuropharmacological findings, has been suggested to account for these differences (27, 30), many other factors will also have to be considered, including those related to age (22) or various clinical features (31) as well as to possible differences in monoamine oxidase activities in these two groups or differences in the metabolism of amitriptyline and its conversion to active (e.g., nortriptyline) or inactive derivatives. Moreover, the effects of amitriptyline on serotonergic neuronal systems may also be of importance in the clinical actions of this drug in some depressed patients.

Other investigators have recently reported that de-

FIGURE 1

*Excretion of VMA Before and During Treatment with Amitriptyline**



*The urinary excretion of VMA was determined before administration of amitriptyline and during treatment with this drug, beginning ten days after the start of amitriptyline administration. Data are plotted as means and standard errors of the means. The numbers within the bars indicate the number of samples analyzed.

pressed patients with low levels of MHPG excretion respond better to treatment with imipramine than do patients with higher levels of MHPG (26). In line with this observation, patient E.S. gave a history of having responded well to imipramine in a previous depressive episode and also showed a rapid response to imipramine when he again became depressed (during treatment with lithium carbonate) several months after his discharge from the hospital. Clinical experience indicates that some patients may respond to both imipramine and amitriptyline, whereas others may respond to neither; hence, there may be considerable overlap. Nonetheless, since the data reported here suggest that amitriptyline may be more effective in depressed patients with relatively higher levels of MHPG (and other norepinephrine metabolites), these preliminary findings, if borne out in our further studies (which will control for age and sex), may provide a rational basis for choosing between amitriptyline and imipramine in the treatment of patients with depressive disorders.

CONCLUSIONS

In summary, these preliminary findings in a small series of patients indicate that some depressed patients excrete relatively low levels of MHPG and other norepinephrine metabolites in urine, whereas certain others excrete much higher levels. Depressed patients with higher levels of norepinephrine metabolites showed decreases in VMA excretion and rapid and sustained clinical responses during treatment with amitriptyline, whereas patients with lower levels did not.

Although it is not possible to draw firm conclusions on the basis of these preliminary observations, which are based on a small number of subjects, the present results together with other recent findings suggest that the levels of the various metabolites of norepinephrine (particularly MHPG) excreted in the urine may provide biochemical criteria for classifying at least some types of depressive disorders and possibly also for predicting the differential clinical responses to treatment with amitriptyline or imipramine. This will be explored further in a large-scale controlled study.

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Dreams as a Prognostic Factor in Alcoholism

BY SEI YOUNG CHOI, M.D.

This study tested the hypothesis that differences in both length of abstinence and demographic characteristics would be found between alcoholics who have dreams about drinking (DD group) and those who do not have such dreams (NDD group). The DD group was abstinent for longer periods of time; these patients were more often white, married, and taking disulfiram than were NDD patients. The author concludes that in outpatient treatment of alcoholics, dreaming about drinking is a good prognostic sign.

FREUD OBSERVED: "It is easy to prove that dreams often reveal themselves without any disguise as fulfilment of wishes. . . . For instance, there is a dream that I can produce in myself as often as I like—experimentally, as it were. If I eat anchovies or olives or any other highly salted food in the evening, I develop thirst during the night which wakes me up. But my waking is preceded by a dream; and this always has the same content, namely, that I am drinking. I dream I am swallowing down water in great gulps, and it has the delicious taste that nothing can equal but a cool drink when one is parched with thirst" (1, p. 123). Consistent with Freud's wish-fulfillment theory (1, 2), one might expect alcoholics who are abstaining from drinking to dream about drinking more than those who are not abstaining.

There are some data on dreaming among alcoholics. For example, in 1961 Moore (3) presented a paper on manifest dreams in alcoholism in which the only significant difference reported between alcoholic and nonalcoholic patients was the alcoholic's perception of himself as the victim of aggression or the object of punishment. The alcoholics showed a tendency (not statistically significant) to dream more of food, water, bottles, and pills; to see more male than female figures; to feel more anger, fright, and depression; to dream with less overt sexual content; and to feel less pleasure in their dreams. Hall (4) found that alcoholics had more dreams in which an oral incorporation occurred than did the nonalcoholics. Scott (5) noted that alcoholics dreamed more about drinking than did a control group.

These studies dealt especially with the manifest content of alcoholics' dreams compared with those of nonalcoholics. However, I have been unable to find any studies dealing with differences in dreams about drinking among alcoholics who had been abstinent for varying lengths of time. The purpose of this study is to investigate the importance of dreams about drinking in alcoholics who are in the process of therapy.

I advanced three hypotheses:

1. More alcoholics who have dreams about drinking (DD group) have been abstinent for at least three months than alcoholics who do not have dreams about drinking (NDD group).
2. More alcoholics who have been abstinent for at least a year have dreams about drinking than alcoholics who have been abstinent for less than a year.
3. The DD group differs demographically from the NDD group.

METHOD

The subjects were 100 alcoholics who attended the alcoholism outpatient clinic of Malcolm Bliss Mental Health Center in St. Louis, Mo. All the patients were being treated at the alcoholic day (1–4 p.m.) or evening (5–9 p.m.) clinic by the author for an average of 30 to 40 minutes of supportive psychotherapy and for an average of 10 to 15 minutes in the medication clinic, usually on a once-a-month basis.

The alcoholism diagnosis was based on findings of blackouts, "benders," impotence, a history of cirrhosis, tremors, and manifestations of delirium tremens associated with drinking; drinking patterns; impaired social adjustment; and subjective and objective feelings about drinking and damaged interpersonal relationships. These criteria are equivalent to the diagnostic criteria suggested by Feighner, Robins, and Guze (6).

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TABLE 1
Significant Differences Between DD and NDD Groups

Item	DD Group (N = 50)	NDD Group (N = 50)	Significance
Abstinent more than three months	40	9	p<.001
Abstinent more than one year	24	5	p<.001
Abstinent longer than median of 92 days	34	9	p<.001

The 50 patients in the NDD group were randomly selected over a period of four weeks. The 50 in the DD group were collected within a five-month period. All were interviewed by means of a questionnaire form in which questions were asked about: a) the duration of complete abstinence, b) the presence or absence of dreams about drinking since abstinence, and c) the patients' feelings in the dreams and after they awakened.

RESULTS

Of the 100 patients who were interviewed, 81 were men (38 black and 43 white) and 19 were women (10 black and 9 white); all met the Feighner, Robins, and Guze criteria for the diagnosis of alcoholism. The ages of the 50 patients in the DD group ranged from 22 to 60, with a mean of 42.5 years; the ages of the 50 patients in the NDD group ranged from 23 to 69, with a mean of 42.3 years.

As shown in table 1, among DD alcoholics who had been abstinent for at least three months, 80 percent (40 of 50) had been abstinent for more than three months, while among the NDD alcoholics only 18 percent (9 of 50) had achieved more than three months' abstinence. This difference is highly significant (chi square = 38.45, df = 1, p <.001).

Eighty-three percent (24 of 29) of the alcoholics who were abstinent for more than one year were in the DD group, compared with 37 percent (26 of 71) of the alcoholics with less than a year of abstinence. This difference is also highly significant (chi square = 17.53, df = 1, p <.001).

The median number of days of abstinence in the total group was 92. The median split test showed that among the DD group, 68 percent (34 of 50) were abstinent more than 92 days, compared with 18 percent (9 of 50) in the NDD group. The difference was statistically significant (median test: chi square = 25.4, df = 1, p <.001). The average number of days of abstinence for the DD group was 358.9, while for the NDD group it was 111.8.

Demographic data including age, sex, race, education, marital status, use of disulfiram (Antabuse), and hours of sleep were analyzed (see table 2).

The difference between the DD and NDD groups' ages was not statistically significant. An examination of the average number of days of abstinence as a function of age showed that patients aged 50 to 59 remained abstinent for the longest time (603 days). Male patients in the DD group had periods of abstinence 3.4 times as long as those of male patients in the NDD group. Female patients in the DD group had periods of abstinence 7.3 times as long as those of female patients in the NDD group.

The average number of days of abstinence was smaller for black patients than for white patients. In addition, black patients were less likely to be in the DD group (33 percent of the blacks) than were white patients (65 percent of the whites). This difference is statistically significant (chi square = 10.25, df = 1, p <.01).

As shown in table 2, at all three educational levels the DD group had longer average periods of abstinence than the NDD group. Among the DD group the higher the education level, the longer the period of abstinence. This trend is not evident in the NDD group.

The patients who were married or single were more likely to be abstinent for longer periods of time than the separated, divorced, or widowed patients. The difference in marital status between the DD and NDD groups was statistically significant (chi square = 12.05, df = 3, p <.01).

There was a tendency for good sleepers (average 7.2 hours) to have longer periods of abstinence than poor or fair sleepers. This tendency was much more evident among the NDD group than among the DD group. In fact, poor or fair sleepers in the DD group had longer periods of abstinence than good sleepers in the NDD group. Poor sleepers (DD and NDD combined) were abstinent approximately half as long as good sleepers (average 292.1 days).

The medication (disulfiram) was used by 36 percent of the patients (16 males, two females) from the DD group, compared with ten percent (four males, one female) in the NDD group. The difference is statistically significant (chi square = 9.54, df = 1, p <.01).

Patients who drank alcohol in their dreams reported having the following feelings or behavior about their drinking: guilty feelings (eight percent), panic (eight percent), failure (four percent), anger (four percent), attempt to refuse drink (six percent), happiness (four percent), and fighting (four percent); 62 percent did not recall any feelings or behavior associated with drinking. However, after they awoke from their dreams of drinking, all of them felt glad, happy, or relieved after they realized they had not had anything to drink.

DISCUSSION

The data indicate that most alcoholics who have been abstinent more than three months have dreams about drinking. It is believed that approximately the first three months of abstinence in outpatient treatment constitute the period in which the alcoholic experiences the greatest struggle against his desire to drink.

The basis of this struggle is thought to be due to the

TABLE 2
Demographic Characteristics of Patient Sample

Item	DD Group		NDD Group		Significance
	Number	Mean Days of Abstinence	Number	Mean Days of Abstinence	
Age					n.s.
20–29 years	3	321.6	3	7.0	
30–39 years	14	244.8	20	31.1	
40–49 years	22	325.3	13	50.7	
50–59 years	10	603.0	12	229.0	
60 years or over	1	365.0	2	375.5	
Sex					n.s.
Men	41	375.7	40	110.3	
Women	9	222.1	10	38.7	
Race					p<.01
Black	16	291.9	32	55.5	
White	34	390.4	18	168.0	
Education					n.s.
Grade 0– 6	6	176.6	4	87.7	
Grade 7–12	35	377.2	41	100.6	
Grade 13–17	9	408.8	5	65.2	
Marital status					p<.01
Married	33	388.5	16	173.0	
Separated	5	272.0	13	15.6	
Divorced	6	305.8	9	24.4	
Single	6	321.5	9	146.5	
Widowed	0	—	3	8.6	
Sleep					n.s.
Good (7.2 hours)	26	374.8	22	194.4	
Fair (5.8 hours)	14	351.0	15	21.3	
Poor (4.5 hours)	10	328.5	13	15.6	
Disulfiram					p<.01
Taking	18	393.9	5	226.0	
Not Taking	32	339.1	45	81.6	

presence of a wish to drink alcohol that has not been dealt with but has been mostly suppressed, denied, displaced, substituted for, or repressed. As a result, the individual's rejected wish for drinking from his consciousness becomes satisfied in his dreams. As long as he is able to satisfy his need to drink alcohol through a safe way (in his dreams), he has less internal (preconscious and conscious) anxiety, is able to deal with continuous internal and external stimulation about drinking, and can be abstinent for longer periods of time than those who do not have dreams about drinking. Particularly during the first three months of abstinence, alcoholics require more active, frequent contacts with counselors, social workers, and other professional staff members and an empathetic object relationship starting with the initial interview.

Older patients, who have less tolerance for alcohol and often more medical complications, may be able to tolerate greater amounts of anxiety associated with the temptation to drink. Thus both the DD and NDD alcoholic groups show a tendency toward longer periods of abstinence as a function of age.

Good object relationships may be one of the most important factors in a good prognosis for alcoholics. Patients with higher educational levels, stable marriages, and job stability have built up their ability to deal successfully with a variety of stressful situations. We could expect that this ability might be applied to the task of stopping drinking. Education may also help in another way: the more educated patients may have more insight and therefore might benefit more from therapy.

The findings regarding longer periods of abstinence and more dreams about drinking among whites compared to blacks may be explained by the general finding of greater marriage stability and higher educational levels among whites.

The influence of jobs on dream content and length of abstinence has not been investigated; however, job stability probably serves as an example of good object relationships. This will be investigated in future papers dealing with evening clinic patients who have jobs.

It is questionable whether the longer period of abstinence among good sleepers is due to their sobriety, or

vice versa. However, in the DD group, both good and poor sleepers were abstinent for approximately the same number of days and were abstinent longer than members of the NDD group, no matter how many hours they slept. This indicates that having dreams about drinking is much more important for prognosis than the quality of sleep.

Disulfiram therapy is important in treating alcoholics. It seems especially helpful to NDD patients, whose average number of days of abstinence was much greater with disulfiram than without. More male, white, 42-year-old, tenth-grade-educated, married good sleepers were likely to take disulfiram in both the DD and NDD groups. When questioned about their thoughts when they had cravings for a drink, all the alcoholics on disulfiram gave similar answers, such as "thought about the drug," "scared how sick I would be," or "What might happen to me if I drink on Antabuse?" Another interesting finding was that when alcoholics not on disulfiram who had long periods of abstinence were asked this same question, most of them said they thought about how sick they were when drinking. This was like a "self-aversive technique." It may be that alcoholics' self-aversive thinking is related to their spontaneous cure, but this will need further investigation.

Freud (1, 2) stated that he found undistorted wishful dreams principally in children, although short, frankly wishful dreams seemed to occur in adults as well. The present study shows that wishful dreaming occurs among alcoholics in the process of therapy.

Scott (5) stated that alcoholics dream more about drinking than do nonalcoholic controls. The present findings imply that it is those alcoholics who are able to abstain from drinking who do the most dreaming.

Scott also said that in his population of alcoholics who were attending a clinic, guilt accompanied the temptation to drink or the actual drinking in the dream in each instance; he attributed this guilt to clinic attendance. However, all the alcoholics in the present study were attending a clinic and most did not report guilt associated with dreams about drinking. In fact, only eight percent of the patients reported such feelings. All the patients felt glad, happy, or relieved after they awakened when they realized that their drinking had occurred only in their dreams.

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Depersonalization, Dysphoria, and Thought Disturbance

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In a previous study the authors demonstrated a significant association between depersonalization and anxiety; in the present one they replicate this finding with an additional 152 patients and also delineate the close association of depersonalization with dysphoric affect and specific types of pathological thinking. From these data it appears that the patient who experiences depersonalization is a person with chronic anxiety, persistent depressive affect, and some degree of psychopathological thinking. It is hypothesized that depersonalization may then be the perceived feeling or experiential state of the person who has this constellation of symptoms.

DEPERSONALIZATION (the feeling of being distant and detached from the world—feeling strange or unreal) is a ubiquitious and complex symptom. Although depersonalization has been reported as a primary phenomenon (1), it is most often noted as one of the symptoms present in such diverse conditions as schizophrenia (2), depression (3), and neurosis (4). It is apparent that depersonalization feelings are widely reported and thereby

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relatively nonspecific diagnostically; however, they retain a *uniqueness* and *consistency* as an *experiential state* that is of considerable theoretical and practical interest.

In a previous study we demonstrated many of the clinical correlates of depersonalization experiences (5). A clearer picture of how we use the construct "depersonalization" may be gained by examining the questions used to determine the presence of depersonalization in the previous and present studies:

1. Have you ever had the feeling you may be two people—one going through the motions while another "you" is observing?
2. Have you ever had the feeling that there was a wall or veil between you and other people?
3. Have you at any time experienced the feeling that you were unreal?
4. Do you ever feel like a stranger to yourself?

Even though these questions are embedded in a more detailed questionnaire, we have been impressed with several aspects of the responses to these questions by well over 300 psychiatric patients. First, depersonalization is a distinct experience that seems to be immediately apparent to people who have experienced it when they are questioned about it in this manner. Secondly, depersonalization is primarily an *inner feeling state*, not necessarily denoting feelings about the body or the "body image" (6). Although depersonalization and the construct of the body image have been used interchangeably by clinicians, there is little experimental or clinical evidence to justify the frequent interchangeable use of these terms (7–9). Thus, if we accept the symptom of depersonalization as primarily an inner feeling state then it follows that it may be present in many emotional states, both pathologic and normal, rather than being associated with only one specific type of psychopathology.

In a previous study we demonstrated the close association of depersonalization and anxiety. In the research reported here we attempted to replicate our previous finding and to examine two other potential aspects of the depersonalization experience that seem theoretically and clinically pertinent—specifically, the relationship of depersonalization to depressive feelings and cognitive disturbances.

METHOD

The presence of depersonalization phenomena was elicited by means of a questionnaire whose derivation and validation were previously described (5). The questions were scored on a 1–5 scale of frequency of occurrence and a total score denoting frequency of depersonalization feelings was recorded for each patient. This questionnaire was administered to 155 consecutive admissions to the Yale-New Haven Hospital (10, 11), none of whom had been used in our previous research. Thirty-eight percent of the sample were men and 62 percent were women; the median age was 25 years. The diagnostic distribution is described in table 1.

Three types of data were collected. 1) Observer ratings (table 2) were used that have been utilized in previous studies (12, 13). 2) Various standardized self-report scales (table 3) that were particularly directed at depressive symptomatology were used. These included the Zung Depression Inventory (14) and the Depression Mood Scale from the Zuckerman Multiple Affect Checklist (15). Since a wide number of tests based on patients' self-reports were administered, two additional scales were given to assess whether test-taking attitudes were unduly influencing the results in this area. These two scales designed to assess certain test-taking attitudes were the Lie scale of the Maudsley Personality Inventory (16) and the Marlowe-Crown Scale (M-C) (17) to assess the influence of social desirability. The correlation between depersonalization scores and the Lie scale was $r = -.14$ (nonsignificant), and that between depersonalization and the M-C scale was $r = -.25$. Since the correlation with the M-C scale was significant, partial correlations to control for social desirability were calculated (table 3) for all subsequent correlations between depersonalization and self-report scales that were significant. 3) The Rorschach test ($N=60$) and the Object Sorting test ($N=150$) were administered to random subsamples of the patients to assess thinking disturbances. Indices used in these latter two tests have been described by us previously (25, 26). An additional sample of 111 patients similar in composition to the main sample was tested at weeks one and four of hospitalization to assess change over time.

TABLE 1
Distribution of Depersonalization Scores According to Diagnosis (N = 155)

Diagnosis	Depersonalization		
	Minimal	Some	Considerable
Personality disorder	12	4	13
Neurotic depression	10	3	6
Psychotic depression	9	4	9
Latent schizophrenia	8	2	21
Classical schizophrenia	13	6	21
Other (including manic patients)	11	2	1
Total	63	21	71

Diagnosis was established by two senior clinicians according to the second edition of APA's *Diagnostic and Statistical Manual of Mental Disorders*. These clinicians did not have access to any of the other data collected in this study. The data were examined for the frequency of each variable, and the correlations of depersonalization with other aspects of psychopathology were obtained.

RESULTS

Depersonalization and Dysphoric Affect

Using a number of different indices (table 3), the data strongly indicate that patients who experience deper-

TABLE 2
Correlation of Observer Ratings with Depersonalization Scores

Psychiatrist's Ratings	Number	Correlation
Guilt	145	r = .04
Depression	127	r = .18*
Isolation	143	r = .23**
Withdrawal	143	r = .27**
Delusions	52	r = .02
Suicide attempts	132	r = .12

*p < .05.
**p < .01.

sonalization phenomena have *significant amounts of dysphoric affect.* Partial correlations to control for test-taking attitudes (the M-C scale) are presented for all significant correlations in this section, and the results are substantially the same. Thus there were significant correlations with: 1) the Zung Depression Inventory (14), 2) the Zuckerman scales for depression and anxiety (15), 3) scales assessing thought and motor retardation (18), and 4) a modified Q-Sort scale we have used previously to assess self-concepts (19). The Q-Sort data showed that these patients have markedly negative self-images. The Semantic Differential (19) confirmed this and demonstrated significantly lower degrees of self-evaluation; however, this was not true of the patients' ratings of themselves on scales for potency and activity.

On a wide range of symptoms assessed by various scales used by Srole and Brimm (21–23), the patients with depersonalization phenomena manifested less optimism and self-confidence (22) and more anomie and frustration (23). These patients did not show diurnal variations in their mood, nor was there a significant relationship to attempted suicide. In this respect, it is of interest that patients who scored high on depersonalization were not necessarily patients who had a primary depressive diagnosis. Formally diagnosed depressives even tended to score somewhat low on depersonalization. However, all of the patients were also rated for secondary depressive features (mainly affect) by the two clinicians and there was a tendency ($p < .10$) for patients who are classified as having significant amounts of depressive symptomatology, but who are given other primary diagnoses, to score higher on depersonalization. Many of the patients with depersonalization phenomena were also noted to have major hysterical features in their presenting clinical picture ($p < .05$), suggesting a relationship with anxiety and other neurotic features.

Depersonalization and Thinking

In evaluating the relationship of depersonalization to thought processes, two specific aspects of the responses to the Rorschach were considered. The first surveyed the scores indicating general disorganization of thinking, while the second assessed those aspects of thinking and perception related by Landis to "extreme permeability" of conceptual boundaries (27). The first aspect of general disorganization in thinking on the Rorschach used in this study was a composite scale of the following measures: 1) extremely deviant indications of idiosyncratic thinking and autistic logic, 2) elaborations in affective terms, and 3) overly specific or overly general elaboration ($N = 60$, $r = .35$, $p = < .01$) (25). This relationship indicates that depersonalization occurs more frequently in persons with high levels of extremely disorganized thinking, but the relationship is by no means so strong as to preclude the occurrence of depersonalization in less disorganized states.

The second aspect of Rorschach responses used was another composite measure of conceptual boundary difficulty that consists of: 1) fabulized combinations, 2) contamination tendencies, and 3) full contaminations. The significant correlations ($N = 60$, $r = .28$, $p = < .05$) with this scale demonstrated that patients with depersonalization manifest extremely permeable boundaries between concepts, at least as manifested by their Rorschach responses. Even when only the most extreme responses indicating conceptual boundary difficulty (contaminations) were used, the relationship between high boundary dissolution and depersonalization was significant.

While the above boundary measure relates more clearly to conceptual boundaries, another Rorschach scoring system, for Barrier and Penetration, has been more clearly related to the "body image" concept (28). The Barrier ($N = 60$, $r = .04$, $p = $ n.s.) and Penetration ($N = 60$, $r = .22$, $p = $ n.s.) scores did not relate to depersonalization. Federn's suggestion that depersonalization involves a disturbance of ego boundaries (29) is partially supported, but the evidence from the Rorschach suggests that this may be related to a more pervasive general disturbance of thinking. The present data may be partially biased by the large number of schizophrenic patients in the sample. However, Shorvon (1) evaluated the Rorschach protocols of 66 patients, none of whom were clearly schizophrenic but who had severe depersonalization symptoms. They seemed to manifest more severe psychopathologic thinking than other patients, as we have found in the present sample. The data from the object sorting test showed no significant correlations (behavioral overinclusion, $r = .07$; idiosyncratic thinking, $r = .05$; conceptual overinclusions, $r = .00$; N for all = 149). While it is a distinct possibility that the Object Sorting test is actually measuring another aspect of thinking (26), this lack of a significant correlation does call for caution in the interpretation of the Rorschach data until further replication.

Depersonalization Symptoms Over Time

To examine changes in depersonalization as acute symptomatology subsides in psychiatric patients, we administered the depersonalization scale to an additional sample of 111 acute psychiatric patients at week one of their hospitalization and then readministered the scale at week four. There were no significant differences between the depersonalization scores at week one and those at week four. In several previous studies, using samples similar in composition to those in the present one, we have

shown that a great deal of acute symptomatology had diminished by the fourth week of acute hospitalization (30). The present data indicating that depersonalization scores had not diminished significantly suggest that, while depersonalization is related to other acute symptoms, it may take a number of weeks before this symptom diminishes significantly.

Relationship Between Depersonalization and Variables Examined in Previous Research

Many of the trends noted in our previous study were reconfirmed, such as high correlations with various tests of anxiety, e.g., the Taylor Manifest Anxiety (24) and the Neuroticism scale of the Maudsley Personality Inventory (16). There were no significant correlations with delusions or hallucinatory phenomena (see table 2). Patients reporting depersonalization scored particularly low on questions relating to suspiciousness and paranoia, and the previously reported (5) relationships to age and sex (i.e., depersonalization is more common in young people but is not related to sex) were replicated in the present sample.

The previously noted positive association between schizophrenia and depersonalization phenomena (5) was also present in this sample, particularly in those patients given a latent or borderline schizophrenic diagnosis. Thus the latent schizophrenic group scored significantly higher on depersonalization ($p < .05$) than the combined depressive group (patients formally diagnosed as either neurotic or psychotic depressives), and the classical schizophrenic group tended to score higher on depersonalization (although the comparison was nonsignificant) than the combined depressive group.

TABLE 3

Correlations for Personality Scales, Mood Level Items, and Depersonalization

Scale	N	Correlation with Depersonalization	Partial Correlation with Marlowe-Crown Scale (17)
Zung Depression Scale (14)	135	.46*	.41*
Zuckerman Scale (15)			
Depressive affect	136	.32*	.29*
Anxiety	136	.32*	.28*
Maudsley Personality Inventory (16)			
Neuroticism	115	.43*	.38*
Introversion-extroversion	115	−.24*	−.22**
Lie	115	−.14	
Depressive Symptoms (18)			
Sadness	140	.12	
Thought retardation	140	.30*	.24*
Motor retardation	140	.25*	.19*
Diurnal variation	126	.06	
Confusion	141	.38*	.32*
Concentration	145	.30*	.24*
Semantic Differential (19)			
Self-potency	115	−.16	
Self-evaluation	115	−.43*	−.38*
Self-activity	115	−.16	
Potency of others	115	.21**	.19**
Evaluation of others	115	−.30*	−.26*
Activity of others	115	−.02	
Modified Q-Sort (19)	136	−.53*	−.49*
Modified Buss-Durkee Scale (19)			
B-D Guilt scale (20)	140	.35*	.35*
Modified B-D Guilt scale	140	.44*	.42*
Srole and Brimm scales (21–23)			
Optimism	133	−.26*	−.22**
Pessimism	133	−.09	
Fatalism	133	.02	
Anomie	133	.31*	.32*
Reflectiveness	133	.04	
Frustration	133	.39*	.34*
Authoritarianism	132	−.12	
Rigidity	133	.00	
Cycloid thinking	133	.32*	.26*
Self-confidence	133	−.33*	−.28*
Dominance	133	−.14	
Autism	133	.44*	.38*
Originality	133	−.01	
Taylor Manifest Anxiety Scale (24)	152	.50*	.46*

*$p < .01$.
**$p < .05$.

DISCUSSION

From these data and previous studies, the picture of the patient who experiences depersonalization is that of a person with chronic anxiety, persistent depressed affect, and some degree of psychopathological thinking. These symptoms cut across many diagnostic categories. This is true of depressive feelings and anxiety, and possibly of certain types of thinking disturbances. It may be that the ubiquity of the depersonalization experience is due to its being an epiphenomenon of these prominent and somewhat pervasive symptoms. As such, depersonalization may be viewed as a "signpost" that the noted group of symptoms could be present, e.g., anxiety, depression, and thinking disturbance. Depersonalization may be one of the feelings or experiential states perceived by the patient who has this constellation of symptoms.

It is conceivable that the categorization into various diagnostic groups of "mental illness" may be related to the type and degree of manifestation of these basic symptoms, e.g., depression, anxiety, depersonalization, disturbed cognition, social withdrawal. The appropriate label is then affixed depending upon the emphasis placed on particular symptoms by either the clinician or the patient. In part this was noted by Aubry Lewis in his classic paper on melancholia: "It is not only that unreality appears elsewhere than in depressive states; it is not only that it is a part of a general relation of the personality to the environment; it is also a token of the essential likeness between clinical states, generally regarded as either opposed or dissimilar" (31, p. 336).

In general we seem to be dealing with a chronic experience of discomfort of the self in the world. The important components of this symptom seem to be related to a constellation of other symptoms, including depressed affect, anxiety, and possibly certain types of disturbances of

thinking. The present data do not provide evidence on whether this is a preformed response of the brain, as noted by Mayer-Gross (32), or a psychologic shutting out of the world due to life experiences (29). However, the constant association of these symptoms in this and other studies, particularly depressed affect and anxiety (5, 8, 31), seems to delineate a certain core symptomatology in what we are presently calling mental illness. This core symptomatology is probably related to what might be labeled a chronic depressive character (13).

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Marijuana and Amphetamine: The Question of Interaction

BY STEVEN ZALCMAN, M.D., BARRY LISKOW, M.D., REMI CADORET, M.D., AND DONALD GOODWIN, M.D.

Animal studies have indicated that marijuana has both a depressive and an excitatory effect on the central nervous system. Since drug users occasionally combine marijuana and amphetamines, a study was performed to determine whether the two drugs have an interaction effect on a variety of physiologic and psychological measures. In general, no such interaction was demonstrated. Previously reported physiological effects of marijuana and amphetamines were confirmed, although some of the psychological effects were at variance with previously reported findings.

MARIJUANA IS generally regarded as a central nervous system depressant. Yet it has been reported that tetrahydrocannabinols potentiate amphetamine-induced hyperactivity as well as hexobarbital sleeping time in animals (1, 2). Because there is evidence that drug users may use marijuana and amphetamines simultaneously (3), we were interested in determining whether the two drugs are synergistic in humans. A previous study (4) evaluated responses to marijuana, marijuana placebo, and dextroamphetamine administered separately to human volunteers. In the present study, marijuana, dextroamphetamine, and placebos were administered separately and together in a factorial design in order to investigate interaction effects.

METHOD

Ten adult males (ages 21–28) were subjects on four occasions. The selection criteria were: 1) chronic use of marijuana, defined as use of the drug more than 50 times; 2) occasional use of oral amphetamines without a history of chronic abuse or intravenous administration; 3) absence of physical and psychiatric illness; and 4) agreement of the subject to abstain from all drugs during the course of the experiment.

At the time this study was performed, the authors were all with the Washington University School of Medicine, 4940 Audubon Ave., St. Louis, Mo. 63110, where Dr. Zalcman was a fourth-year medical student, Dr. Liskow was a Resident in Psychiatry, and Drs. Cadoret and Goodwin are Associate Professors of Psychiatry. Address reprint requests to Dr. Goodwin.

This work was supported in part by Public Health Service grants MH-09247, MH-05804, and MH-12087 and Research Scientist Development award MH-47325 (to Dr. Goodwin) from the National Institute of Mental Health.

The authors wish to thank Leo Hollister, M.D., for providing some of the psychometric tests employed in this study.

The four experimental conditions in the factorial design for each subject were: 1) placebo marijuana, placebo amphetamine; 2) placebo marijuana, amphetamine; 3) marijuana, placebo amphetamine; and 4) marijuana, amphetamine. The order of the experimental conditions was randomly assigned and unknown to the subjects and observers. Each subject was tested at weekly intervals in the morning, after having fasted. On each occasion the subject was given a control battery of tests, drank 250 cc. of a noncaloric soft drink containing either 15 mg. of dextroamphetamine sulfate or no drug, smoked two 500 mg. marijuana cigarettes that contained either placebo material or 1.5 percent delta-9-tetrahydrocannabinol (THC),[1] waited 90 minutes, and was given a second battery of tests.

The test battery measured physiological and psychological parameters. Physiological measures included blood pressure, pulse, respiratory rate, pupil size, and conjunctival injection.[2] The psychological tests included the Digit Symbol Substitution test, the Digit Span, the Mood Adjective Checklist, the Number Facility and Flexibility of Closure tests, and a subjective rating of hunger.

The Digit Symbol Substitution test, a subtest of the Wechsler Intelligence Scales testing cognitive function, was scored for the number of correct substitutions made in 90 seconds. The Digit Span, another Wechsler Scale subtest, tests immediate recall and capacity for simple abstraction (the ability to repeat numbers backwards). It is scored as the sum of the forward and backward digit spans. The Mood Adjective Checklist consists of 27 adjectives describing current mood states, rated on a four-point scale from "not a bit" to "extremely." Scores were obtained for three factors: an "active" factor, a "drowsy" factor, and a "stimulation" factor. This scale has been shown to successfully distinguish between active and placebo amphetamine regimens solely on the basis of subjective criteria (6). The Number Facility test consists of 90 simple addition problems and the Flexibility of Closure test consists of 36 line figures that the subject must reproduce in an adjacent field of dots (7). Both tests have numerous equivalent forms, so that no subject received the same form twice. The subjects were allowed to

[1] Lot no. 2-PF-81, supplied by NIMH, which assayed it for delta-9-THC content. We confirmed their results at the conclusion of the experiment by analyzing a sample according to the method of Lerner (5).

[2] Pupil size was measured with the Rosenbaum Pocket Vision Screener under conditions of constant illumination and focal length. Conjunctival vessel dilation was rated from 0 to 4, with 3 and 4 indicating marked vascular congestion.

complete the entire form for these two tests, permitting scoring of both the number correct and the time required. Hunger was rated on a ten-point scale, with 1 representing no hunger and 10, intense hunger.

RESULTS

The mean differences between the predrug and postdrug values on all parameters were calculated for the four experimental conditions for each subject. These data were then subjected to analysis of variance as a 2 × 2 factorial design. Physiologic measures showed several significant main effects for either amphetamine or marijuana, but no significant interactions. The pulse rate was significantly increased by marijuana ($p < .01$), which is consistent with previous reports (8). The pulse rate showed no detectable amphetamine or interaction effect. Systolic and diastolic blood pressure were increased by amphetamine (systolic, $p < .01$; diastolic, $p < .05$); neither a marijuana nor an interaction effect was noted. The respiratory rate was unaffected by marijuana but it was increased by amphetamine ($p < .05$), again without discernible synergism or antagonism. Pupil size was unaffected by either drug. Conjunctival vessels were dilated by marijuana ($p < .01$), but showed no amphetamine or interaction effect.

Performance on the Digit Symbol Substitution test has been reported to be improved by amphetamine (4), to be decreased by marijuana in naïve users (8), and to show a trend toward improved performance after marijuana in chronic users (8). Analysis of our data revealed a trend toward poorer performance by chronic users after marijuana that closely approached significance at the $p < .05$ level. There was no significant amphetamine or interaction effect.

Performance on the Digit Span was decreased by marijuana ($p < .05$). Once again amphetamine failed to alter performance, either alone or in conjunction with marijuana.

Hunger, as detected by our subjective rating scale, was decreased by amphetamine ($p < .01$) but not otherwise affected. This is an interesting finding in view of the hunger and hyperphagia that are often reported to follow marijuana use.

The Flexibility of Closure results were not significant for the number correct or the time required. The results of the Number Facility test were not significant for the number correct for either drug. The time required for this test, however, was decreased by amphetamine ($p < .01$), increased by marijuana ($p < .01$), and decreased by the mixed regimen ($p < .05$).

The three "mood factors" were analyzed, comparing the predrug scores with the scores at two hours and two and three-quarters hours after drug ingestion. The "active" factor was not affected by either drug, in contrast to Hollister's finding that amphetamine increased "activity" and marijuana decreased it (4). The "drowsy" factor was decreased by amphetamine ($p < .01$), but no marijuana effect was noted. The "stimulation" factor was increased by amphetamine ($p < .05$ at two hours, and $p < .01$ at two and three-quarters hours). For none of the three factors was there evidence of drug interaction.

DISCUSSION

The effects of these two drugs on the physiologic parameters were consistent with those in previous reports. Marijuana resulted in tachycardia and conjunctival injection, while amphetamine increased blood pressure and the respiratory rate. Pupil size was unaffected by either agent, and there was a lack of evidence for drug interaction.

The results of the psychological tests were more equivocal and not always consistent with previously reported findings. This might be explained by differences in drug dosage. Earlier reports have failed to stipulate how long before the completion of their experiments the marijuana was analyzed, and it may have subsequently deteriorated. There are also certain methodological differences. Our analyses involved comparing predrug and postdrug performances on the same day. Hollister (4) tested his subjects only after drug administration, with placebo marijuana administered on a separate occasion that served as a baseline.

With regard to drug interaction, the only hint of this concerned the time required for completion of the Number Facility test. Amphetamine improved performance, marijuana worsened it, and the combination resulted in an intermediate score with amphetamine improvement predominating.

On the basis of these results, it would appear that marijuana and amphetamine act independently in man insofar as their effects can be determined by the tests employed in this study. This by no means precludes the possibility that different indicators would disclose such an interaction. It should also be noted that the dosage levels of THC used in the animal studies showing synergism with amphetamine were quite high (up to 25 mg./kg.) and that the behavior observed (motor activity) is not strictly comparable with the parameters measured in this study.

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The Relationship Between Background and Extent of Heroin Use

BY LT. STEVEN F. BUCKY, MC, USNR

The backgrounds of individuals who had used heroin fewer than five times and those who had used it six or more times were studied to determine if there were any significant differences. The subjects were Navy enlisted men who were given an anonymous questionnaire. Significant differences were found: in general, more extensive heroin use was related to poorer relationships with family as well as more difficulties in school and in the Navy.

IN A STUDY REPORTED in 1971 (1) comparing nonusers and marijuana, amphetamine, LSD, and heroin users, I found that compared to the other groups, the heroin users had significantly more difficulty at home, in school, in marriage, and in the Navy. Using the multiple correlation technique, 15 variables combined to correlate at .67 with the criterion of heroin use.

A number of variables contributed to this high correlation. There was a significant positive relation between heroin use and expulsion or suspension from school, arrests, disciplinary action by the Navy, and the mother's education and drinking habits. Other variables that were positively related to heroin use were the father's drinking habits and education and the subject's education. There was a significant negative relationship between heroin use and the mother's smoking habits and the subject's age. Many of the fathers of this group were not living. Other variables that negatively related to heroin use were family income, the father's smoking habits, and courts martial. The subjects were frequently firstborn or only children.

Other research (2) described heroin users as narcissistic and passive-dependent. Torda (3) described them as being subject to magical thinking and daydreaming. They were extremely mistrustful, in a way that bordered on paranoid projection. Torda also found that for the heroin addict, the mother represented authority; overt aggressive behavior on the part of the addict was intolerable. The father of the heroin user was frequently absent; when present, in many cases he was an alcoholic. The addict was usually the favorite child of the mother, although she was often unable to express genuine love for him. The subjects in the study usually experienced complete helplessness and worthlessness, with very low frustration tolerance. They were also described as hypersensitive, masochistic, and as loners.

Hekimian and Gershon (4) described the heroin user as sociopathic and as desiring the euphoria from the drug to control his underlying intense depression. These authors also found the heroin addict to be passive. Steffenhagen and associates (2) found that the heroin addict had a profile consistent with that of the sociopath. Heroin addicts also revealed much more pathology on the Minnesota Multiphasic Personality Inventory than subjects using other drugs.

Although, as previously noted, a multiple correlation of .67 was obtained in my previous attempt to predict heroin use, it was felt that for a more conclusive prediction one must discriminate the individual who has just tried heroin and has decided to discontinue its use from the individual who uses the drug regularly. In an attempt to distinguish between the "experimenter" and the more extensive user, the present study compared 42 social history variables for individuals who reported having used the drug five or fewer times with those who had used it more than six times.

METHOD

The subjects were 42 Navy enlisted men who were stationed at one of five bases in the Pensacola, Fla., area. Twenty-three of the subjects reported having used heroin five or fewer times (Hexp group); 19 subjects had used the drug more than five times (H group). The subjects were identified as heroin users from a questionnaire that was given anonymously to 1,508 subjects.

The questionnaire was a modification of the standardized psychiatric interview questionnaire given to all inpatients and outpatients at the Naval Aerospace Medical Center at Pensacola. Instead of using the open-ended questions, each item was reworded in multiple-choice form so that it could be easily analyzed by a computer. There were 42 items, 12 of which pertained to specific drug use. Eighteen items focused on the subject's parents and siblings, two on his education, three on legal difficulties, three on his marital status, and three on his military background; the other asked the subject's age.

RESULTS

As shown in table 1, the results indicate that there were significant differences between the Hexp and the H groups.

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Opinions expressed herein are those of the author and do not necessarily reflect the views of the Department of the Navy.

TABLE 1
Comparison of Heroin Users and Experimental Heroin Users, in Percentages

Variable	Heroin Users	Experimental Heroin Users
Has taken drugs for at least five years	53	32
Fair-to-poor relationship with father	42	31
Fair-to-poor relationship with mother	37	18
Fair-to-poor relationship between parents	22	47
Mother and father are not living together	74	52
Was truant	95	78
Was suspended or expelled from school	80	60
Was arrested	82	65
Went before captain's mast	78	52
Was court-martialed	24	21

The subjects in the H group were generally older. As for other drug use, the subjects in the H group had used marijuana, amphetamines, and barbiturates to a lesser extent, although they had used LSD more than had the Hexp group. It is interesting to note that there was very little difference between the groups in terms of whether the subjects had used the various drugs in a group or alone, with the exception of heroin. The H group used that drug more often in group settings than did the Hexp group. The subjects in the H group had started to take drugs because "it felt good" or because of an association with a friend on drugs. In contrast, the Hexp group did not know why they had started or the reason was other than those described above. The H group also reported having been on drugs for a longer period of time than the Hexp group.

In an analysis of the subjects' family backgrounds, it was found that the fathers of the H group were younger and had more education than those of the Hexp group. The subjects in the H group had poorer relationships with their fathers. Less heavy drinking was reported for the fathers of the H group; no difference was observed in terms of the fathers' smoking.

The mothers of the H group were older than those of the Hexp group; no difference was observed in terms of their education. The relationship between the mother and son was described as being poorer; there was more heavy drinking and smoking among the mothers of the H group than among those of the Hexp group.

It is particularly interesting to note that in spite of the poor relationship between father and son and mother and son, the relationship between the parents (when they were still living together) of the H group was better than that of the parents of the Hexp group. Nevertheless, for the H group there were fewer parents living together and more deceased fathers and mothers; also, more subjects reported that they did not know whether their parents were living or dead than in the Hexp group.

As for socioeconomic variables, there were more laborers and farmers and fewer managers, sales workers, service workers, and craftsmen among the parents of the H group; nevertheless these families had higher family incomes than the families of the Hexp group.

The subjects in the H group came from larger families and were more often the youngest children in the family. They had completed more schooling but graduated at an older age and were more frequently truant, suspended, expelled, or arrested during their school years than the subjects in the Hexp group.

The subjects in the H group had more divorces and more children than those in the Hexp group. They had been in the Navy longer and had been more often to captain's mast (disciplinary action) and had more courts martial than the Hexp group.

DISCUSSION

There are numerous limitations in the present study: 1) the operational definitions of the "more extensive user" and the "heroin experimenter" are arbitrary; 2) there are too few subjects; and 3) it is virtually impossible to evaluate the validity and honesty of the subjects' responses to the questionnaire. Nevertheless, these results combined with my previous findings suggest that there are differences between heroin users and other drug users or nonusers, and more specifically between the long-term heroin user and the individual who has tried the drug and either discontinued its use or gone on to other drugs. All of these factors are seen as important in the ultimate prediction and prevention of heroin use.

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The Psychiatric Treatment of the Geriatric Patient

BY ROBERT J. NATHAN, M.D.

The author demonstrates, through case examples, how geriatric patients can be integrated into a general hospital's intensive therapeutic milieu program. He points to the need for further investigation of the advisability of segregating these patients from the general psychiatric population, as is now commonly done; perhaps other approaches will prove more fruitful.

DISCUSSION OF THE psychiatric treatment of the geriatric patient is usually so fraught with pessimism and hopelessness as to make most practitioners within psychiatry extremely leery of any involvement at all with these patients. Notwithstanding literature to the contrary (1), the consensus among practicing psychiatrists is that the geriatric patient presents very little in the way of therapeutic possibilities. In this paper I will present evidence that geriatric patients with both functional and organic factors operative in their mental illness can indeed be restored to reasonably satisfactory function by the use of the facilities of a general hospital's small psychiatric unit which employs the principles of the intensive therapeutic milieu-therapeutic community (2, 3). The patients to be considered are three of a series of at least 39 patients; I will describe them in some detail.

BRIEF HOSPITALIZATION IN AN INTENSIVE THERAPEUTIC MILIEU

Case Reports

Case 1. K.W., a 68-year-old woman, had been living in a nursing home for approximately three years, had had intermittent psychotherapy during that time, and was rehospitalized in April 1971 with complaints of anorexia, insomnia, moderate disorientation, and an obsessive-delusional idea that all the people in the nursing home were interested in forming a sexual liaison with her. In addition to this, when she went to bed at night she was convinced that rodents were crawling over her bed and nibbling at her, especially at her genitalia.

Case 2. R.J., a 73-year-old man, was hospitalized for manic behavior that had been going on for approximately six months. He lived in an apartment with his wife. He was getting substantial loans from banks, had rented an apartment for himself in a nearby city, was engaged in writing "the great American novel," and had periods of angry outbursts against his wife. He claimed to feel very good and certainly much better than immediately prior to the onset of his manic illness, when he was tired. His only previous psychiatric history consisted of a short hospitalization about eight years before his apparent manic episode. In this man's mental status examination lapses of memory were extremely common, and there was some disorientation as to date and place.

Case 3. D.F., a 72-year-old woman living in a retirement home, had had periodic depressions for approximately eight years requiring hospitalization in two institutions, with electroshock therapy given both times. Her symptomatology at the time of the hospitalization described here consisted of anorexia, insomnia, obsessive concern over money, and a delusional belief that she had cancer of the bowel, which was made evident to her because of her severe constipation. In addition to this, she claimed to have stopped urinating and this, too, was evidence of her cancer. In addition to these symptoms the patient had been showing definite memory lapses.

All three of these patients were admitted, at different times, to the Hahnemann Inpatient Unit, a 14-bed psychiatric unit located within Hahnemann Hospital. As previously noted, the ward uses the techniques of the intensive therapeutic milieu. The average length of stay is approximately 14 days. The unit is completely heterogeneous regarding age, race, and social class. In addition to serving as a resource for referral of private patients, it also serves as one of the inpatient units for the Hahnemann Community Mental Health Center. The only age restrictions are those at the younger end of the scale; only rarely will patients below the age of 15 be admitted. At no time does the unit have a preponderance of geriatric patients; the most at any given time is three or four.

The unit itself provides a five-day-a-week "milieu" meeting that lasts for approximately an hour and involves all the staff and all the patients in the unit. The content of this meeting ranges anywhere from discussion of problems of living on the unit to discussion of particular patients and their particular problems in relation to the group. A fair amount of attention is paid to the communicative meaning of symptomatic behavior and its clarification. This meeting is the central focus of the day's therapeutic activities; and, as with almost all of the other activities on the unit, all patients must participate.

In addition, there is group art therapy and group recreational therapy on a daily basis, role playing on a weekly basis and, for patients for whom it is judged applicable, individual psychotherapy and pharmacotherapy as well.

The stated expectation of this unit is that it will return a hospitalized patient to his community within two to

Read at the 125th annual meeting of the American Psychiatric Association, Dallas, Tex., May 1–5, 1972.

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three weeks and that his psychiatric behavior will have been sufficiently altered so as to allow him to remain in the community. It is recognized that this is not a definitive treatment and that follow-up psychotherapy is absolutely essential. This is stressed throughout the patient's hospital stay. Virtually all hospitalized patients, including those privately referred, are treated by the psychiatric staff. The staff consists of a Board-certified psychiatrist and graduate psychoanalyst who is chief of the inpatient service, two first-year residents in psychiatry, a social worker, a part-time psychologist, approximately 14 nurses, an art therapist, and a recreational therapist. As with any such operation, there are frequent meetings held among members of the staff to discuss the patients. In general, the unit has been functioning at or above the level at which it was originally intended.

The staff was initially reluctant to accept geriatric patients on a regular basis. It was felt that the milieu was constructed primarily for the younger patient and that the older patient would tie up the staff for long periods of time in making dispositions, thus draining off the direct therapeutic interest that the staff had. In addition, the staff tended to feel that geriatric patients almost universally have a significant degree of chronic brain syndrome, which would make any treatment they could offer ineffective.

This pessimism can be seen in case 1. When this woman was admitted it was felt that her primary diagnosis was that of a psychotic depression and that she could best be treated with massive doses of antidepressants. She was placed on a moderately high dose of imipramine hydrochloride (Tofranil), which promptly resulted in her becoming so organically psychotic that she literally did not know where the bathroom was and began wandering throughout the general hospital. Thus the self-fulfilling prophecy appeared to be in operation. However, the chief of the service recognized what in fact was happening and reduced the medication. To the amazement of all, the patient's organic psychosis began to clear up, and she began to participate in activities on the unit. Within 17 days she was discharged to her nursing home; she was eating and sleeping well and was free of delusional and obsessional symptoms.

The patient in case 2 was placed on small amounts of medication, and although small signs of organic impairment were seen, Mr. R.J. never developed a full-blown organic psychosis. He was eventually placed on lithium carbonate, but had markedly calmed down prior to that medication. He was well accepted into the group with the younger patients, and after about 16 days was discharged to his home.

Mrs. D.F. was admitted in a state of severe depression and remained so for approximately three weeks, with little or no participation within the group or interaction with other patients. When this reaction was noted and analyzed within the group setting, there was a gradual loosening up of the patient's aggressivity, she began verbalizing more easily, and after about five weeks she was discharged to her retirement home. She had been receiving moderately large doses of phenothiazines but had not developed any further organic symptoms.

All three of these patients were observed by psychiatrists following their discharge and appeared to be doing reasonably well.

DISCUSSION

The model upon which the Hahnemann Inpatient Psychiatric Unit was based is fully described by Artiss (2, 3). His patient population consisted of young schizophrenic soldiers, most of whom experienced their first psychotic break soon after entering the Army. The aim of the unit was to restore these soldiers to duty and allow them to finish their full Army commitment. It was well known that other treatment methods had been unsuccessful in accomplishing this aim. Patients could stay on these units up to six months.

As described earlier, the Hahnemann modification differs materially in patient population and length of stay but less so in ultimate purpose: the restoration of the patient to his community function. Yet it would appear that the principles of the intensive therapeutic milieu, of the primary role that adequate communication plays in the treatment of not only the schizophrenic but all seriously disturbed patients, has been justified by this much more heterogeneous operation. The geriatric patient, with his infinite variety of functional diagnoses and almost constant overlay of organic factors, appears to be yet another category of patient that can benefit from this modality.

Within such units, active participation by all members of the patient group is expected and demanded. There are no acceptable reasons that would excuse any patient from participation in all of the group activities. It was originally felt by some members of the staff that the geriatric patient would be unwilling to participate in a meaningful way with other patients 50 or 60 years his junior and that the age-related problems were so mutually exclusive as to prevent any interaction. This obviously did not prove to be the case, and there also was no stereotyping of the role of the geriatric patient. Although at times the geriatric patient was protected by the group, this does not appear to have been generally true with the three patients discussed. Hostile interchanges frequently took place, and the staff then used them in appropriate ways to illustrate the patient's dynamics, for example, in the case of a depressed geriatric patient.

The push for active participation would in these cases appear to contradict the disengagement theory of Cumming and Henry (4). Regarding the normal geriatric population they surveyed, the authors felt that the tendency of older people to withdraw from the mainstream of life was a normal part of the aging process. Others, of course, have disagreed strongly with this concept. In our experience at Hahnemann Hospital with a population exhibiting pathological psychological symptoms, it would appear that forced participation within a heterogeneous age group is therapeutically advantageous. A question we cannot answer is whether a similar program with a ho-

mogeneous age group would be equally beneficial.

This question assumes major importance at this point because of the ever-increasing demand that is being made upon medicine in general and psychiatry in particular to participate more actively in the care of the geriatric patient. The tendency to structurally and functionally isolate the geriatric patient into separate services, buildings, etc., is already well established. What is not fully understood at this point, however, is whether this is the best method to control the problem. Controlled studies are desperately needed to resolve this problem prior to the expenditure of large sums of money.

The fear that a geriatric "boarder" engenders in most general medical and psychiatric services is one of the chief obstacles to our providing adequate treatment for these patients. But on a unit with extremely limited facilities, we were able, through aggressive family intervention and social services cooperation, to handle all of the geriatric patients that came onto the unit. In Pennsylvania, as in many other states, the state hospital system is (to put it mildly) loath to accept any geriatric patients. It is, in essence, an avenue that is no longer open to us, and we have had to arrange our own disposition resources. Easy solutions such as building larger and better old age homes, nursing facilities, or state hospital pavilions may not be the best answer.

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DISCUSSION

JACOB H. FRIEDMAN, M.D.[1] (Bronx, N.Y.)—Dr. Nathan has the foresight to show that a geriatric patient with functional illness complicating a mild organic brain syndrome can be successfully treated with short-term therapy on the psychiatric ward of a general hospital, among a heterogeneous age group. However, his ward is a 14-bed psychiatric unit with a staff consisting of a Board-certified psychiatrist and graduate psychoanalyst, two first-year residents in psychiatry, a social worker, a part-time psychologist, approximately 14 nurses, an art therapist, and a recreational therapist—a total of 21 professionals, with perhaps additional attendants. I do not know of any ward in a nonprivate mental hospital, especially a state hospital (formerly the "dumping ground" for the geriatric patient), that has the number of qualified psychiatric personnel that Dr. Nathan was able to acquire. Dr. Nathan states that he does not have the answer to whether a similar program with a homogeneous age group would be equally beneficial.

Two published papers from Bronx State Hospital (1, 2) answer Dr. Nathan's question. At Bronx State Hospital, which is affiliated with Albert Einstein College of Medicine, Bronx, N.Y., we have had a new geriatric admission policy (1) since 1967 that excludes patients with nonpsychotic organic brain syndromes, mild psychoses, and mild psychoneuroses; and we have been able to change our original 14 geriatric wards from an inactive custodial unit to an active therapeutic unit (2). On this unit we use individual psychotherapy, group psychotherapy, therapeutic community meetings, small group meetings with selected patients, family therapy, recreational therapy, occupational therapy, work for pay, sensory training and reality orientation, chemotherapy, occasional electroshock therapy, a minor hotel ward, and an active aftercare clinic. We have reduced our geriatric population to a four-ward unit, which eventually will be reduced further to a two-ward unit. Our main difficulty is that often a recovered patient, ready for discharge, has nowhere to go and must be kept for months in the hospital unnecessarily. A geriatric crisis intervention team (3) at Bronx State Hospital has been successful not only in keeping the geriatric patient in the community but also in alleviating his symptomatology, even to the point of recovery.

If further attention were paid to the geriatric patient in outpatient clinics, much hospitalization would be unnecessary. An unusually successful geriatric mental hygiene clinic (4) was established in 1961, the first of its kind in the United States to be connected with a community general hospital, and I was its director. Before this clinic could be initiated, valid reasons (5) for its needs had to be submitted. It was financed through a grant from the New York City Community Mental Health Board and the Board of Trustees of Lebanon Hospital, Bronx, N.Y., which was renewed on an annual basis. Unfortunately, the clinic was discontinued in 1964 for financial reasons, for what were considered more pressing psychiatric problems involving the younger population in the community. A personal communication (6), dated January 28, 1972, from the Biometry Branch, National Institute of Mental Health, states, "To date, there may be only very, very few if any outpatient psychiatric clinics in general hospitals or community mental health centers serving the geriatric population exclusively." The organization of a geriatric mental hygiene clinic can easily be achieved in any community general hospital.

At Bronx State Hospital we have not been successful in mixing geriatric patients with younger patients on one ward. We do not have the sufficient and proper staff that Dr. Nathan has been fortunate in procuring. Dr. Nathan proves that the mentally ill geriatric patient can be helped even in the psychiatric ward of a general hospital, among patients of all ages, provided there is ample help and the proper philosophy.

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KARL MURDOCK BOWMAN

Karl Murdock Bowman
1888–1973

KARL MURDOCK BOWMAN, one of the nation's most distinguished psychiatrists and a former President of the American Psychiatric Association, died in San Francisco on March 2, 1973, at the age of 84. He had an especially long and notable career and did not fully retire until 1967, when he was 78 years old; this was 11 years after his retirement to emeritus status at the University of California. He was as active during those retirement years as he had always been: teaching half-time for several years and continuing his research and writing, acting as visiting professor of psychiatry at the Siriraj Medical School in Bangkok, Thailand, and serving from 1964 to 1967 as Director of Mental Health for the State of Alaska and as superintendent of the Alaska Psychiatric Institute at Anchorage. Earlier, at the request of the United States Public Health Service, he had helped to plan the mental hygiene program for the new state.

Dr. Bowman was born in Topeka, Kans. After his graduation from the University of California School of Medicine in 1913, he worked at Bloomingdale Hospital in New York City and the New York Neurological Hospital, and from 1921 to 1936 was chief medical officer at the Boston Psychopathic Hospital, where he worked closely with Macfie Campbell. During those years he taught at the Boston University College of Medicine, Harvard Medical School, Simmons College School of Social Work, and the Smith College School of Social Work. In 1936 he assumed the directorship of the division of psychiatry at Bellevue Hospital in New York City, and during his time there he began the fundamental investigations in the fields of alcoholism and shock therapy that were to interest him for many years. He was professor of psychiatry at the New York University College of Medicine, where he remained until his appointment in 1941 as the first chairman of the newly created department of psychiatry at the University of California School of Medicine in San Francisco and as first medical director of the Langley Porter Clinic (later Neuropsychiatric Institute). His broad vision and indefatigable efforts helped develop the Institute into one of the first-class psychiatric institutions in the country, where teaching and research programs flourished.

In 1935 Dr. Bowman was appointed a Lieutenant Commander in the U.S. Naval Reserve, and in 1952 he was transferred to its honorary retired list. Over the years, he served as a consultant to the Army, Navy, Air Force, Veterans Administration, and U.S. Public Health Service, becoming especially active during World War II. He was a member of the National Research Council's Committee on Neuropsychiatry and a director of California's research into sexual deviation. His love of travel helped him to enjoy his many services to foreign countries, among which were his organization of a psychiatric department at the University of the Philippines and, in 1947, at the invitation of the World Health Organization, the organization of the National Neuropsychiatric Institute at Nanking for the Republic of China. During the war years he served twice as President of APA, and he also served two terms as a director of the American Board of Psychiatry and Neurology. He served on a number of editorial boards, including those of *The American Journal of Psychiatry, Quarterly Journal of Studies on Alcohol, California Medicine, Quarterly Review of Psychiatry and Neurology,* and *Geriatrics.*

Dr. Bowman's research interests ranged widely, most notably into the fields of schizophrenia, alcoholism, geriatrics, and sexual problems. His bibliography lists more than 200 references; one of the last was a report on the major earthquake that struck Alaska while he was at the Alaska Psychiatric Institute in Anchorage. He was a plain speaker whose courageous, frank, and knowledgeable statements on controversial subjects were characteristic of him throughout his long career of academic and public service. Long before civil rights became a watchword, he was outspoken in asserting the rights to legal protection and medical care of the mentally ill, sex offenders, addicts, and alcoholics.

Karl Bowman was honored many times. In 1964 he was the first recipient of the Royer Award for contributions to psychiatry in the San Francisco Bay Area; he received the Wellcome Silver Medal in 1920 for research on psychiatric disorders and their effect on the military; and he was given the Thomas W. Salmon Award in 1968 for distinguished service in psychopathology. He was awarded the honorary degree of Doctor of Science by his alma mater, Washburn College in Topeka, Kans., and of Doctor of Laws by the University of California.

Karl Bowman cared a great deal about a lot of things; what he cared about he worked for and, if necessary, he fought for. He cared deeply about his family and raised four sons—each to carry on a distinguished career of his own. He cared about his students and expended great amounts of thought and energy to improve the quality of their training and to encourage them to grow into humane and sensible physicians. He cared about his colleagues and was always ready to share their problems, encourage their interests, and appreciate their successes. Most of all, he cared about all the patients—his own and others'—for whose benefit he practiced medicine, taught students, ran hospitals, recruited needed professional workers, wrote papers, harangued administrators and legislators, and carried on an incredible variety of activities that filled every day of his life, almost to its end.

Karl Bowman was my mentor and friend, and I appreciated his willingness to give younger people a chance to grow, to mature, and to assume responsibility and authority. He always said he tried to pick good people and thereafter expected them to do a good job. What was unusual was his ability to let them do it their own way and to be tolerant of the diversity of professional viewpoints and activities that inevitably developed. He himself had a broad perspective of the entire field of psychiatry and of the related fields that grew increasingly important throughout the course of his career. While he might become impatient with the overenthusiastic proponents of a particular idea or point of view, he never failed to listen and was always ready to accept as much as he felt had merit.

Dr. Bowman is survived by his widow, the former Anna Lowrey, and three sons—Richard S. Bowman, Ph.D., Thomas E. Bowman, Ph.D., and Walter M. Bowman, M.D.

Erik Erikson has written of the personal integrity achieved by "him who in some way has taken care of things and people and has adapted himself to the triumphs and disappointments adherent to being, ... [who has accepted] his one and only life cycle as something that had to be and that, of necessity, permitted of no substitutions." That was Karl Bowman. He gracefully accepted his share of life's disappointments and deservedly enjoyed a large share of its triumphs. He never failed to take care of the things and people for whom he cared and felt responsible as physician, teacher, colleague, friend, father, and husband. Everyone who was in some way a part of his life will always be glad he was a part of theirs.

ALEXANDER SIMON, M. D.

Lawrence Kolb
1881–1972

Honor a physician with the honor due
unto him,
For the Lord hath created him.
For of the Most High cometh healing.
The skill of the physician shall lift
up his head;
And in the sight of great men he
shall be in admiration.
The Lord hath created medicines out of
the earth;
And he hath given men skill,
That he might be known in his marvellous
works.
Then give place to the physician,
for the Lord hath created him.

—Ecclesiasticus 38

ON NOVEMBER 17, 1972, Lawrence Kolb, the man who perhaps more than any other was responsible for the great advances in mental health in the United States, died at the age of 91.

Born in Galesville, Md., Dr. Kolb received his degree of Doctor of Medicine from the University of Maryland in 1908. Following an internship at the University of Maryland Hospital he was commissioned an Assistant Surgeon in the U.S. Public Health Service in 1909. His graduate work in psychiatry was carried out at the New York Psychiatric Institute, where, more than 30 years later, his son Dr. Lawrence C. Kolb was to serve as director.

In 1910, Dr. Kolb married Lillian Hess Coleman of Baltimore, Md.; they had three children: Dr. Lawrence C. of New York City, Charles of Raleigh, N.C., and Mrs. Otis A. Shorr of Cincinnati, Ohio.

Dr. Kolb's early career in the Public Health Service afforded him wide experience in psychiatry and mental health that was ideal preparation for heading the Mental Hygiene Division. From 1919 to 1923 he served as medical officer in charge of the Hospital for Nervous Diseases at Waukesha, Wis., where he pioneered in providing psychiatric care for veterans of World War I. From 1923 to 1928 he was assigned to the Hygienic Laboratory in Washington, D.C., the precursor of the National Institutes of Health. During these years Dr. Kolb was occupied with investigations of drug addiction, and his studies were largely instrumental in providing the basic psychological and biological information concerning the phenomena associated with this condition; his publications remain classics in the field.

His interest in drug abuse and alcoholism persisted throughout his career. From early in his career he was outspoken in his opinion that they are illnesses, in spite of the powerful opposition that expressed the popular attitude of the day that the basic etiologic factor was deliberate criminal behavior. Dr. Kolb publicly asserted that, in his opinion, government control was incapable of solving the problems of addiction, which he believed was rooted in deep-seated psychopathology. Time has proven his courageous position to be correct. He not only was among the first psychiatrists to recognize the value of Alcoholics Anonymous but he also early pushed for a similar type of organization for drug addicts. His interest in the subject persisted until his late life and found fruition in the publication of his last book, written when he was 82.

From 1928 to 1933 Dr. Kolb was in Europe carrying out studies related to the problems encountered in the mental examination of foreign nationals seeking to emigrate to the United States. These studies were important in the revamping of the examining instruments and criteria for admission to this country. In 1933 he was given charge of the Department of Justice medical center, then under construction in Springfield, Mo. Under his direction this hospital launched its trailblazing endeavors in the treatment and rehabilitation of mentally and physically ill offenders.

In 1934 his expertise in the field of narcotic addiction made Dr. Kolb the logical choice to open and direct the federal government's first major facility for treating the addict. He was designated medical officer in charge of the first U.S. Narcotic Farm (as it was called), which was then under construction at Lexington, Ky. The world-renowned research program at that institution was conceived and brought into being by him.

In 1938, Dr. Kolb became Chief of the Mental Hygiene Division of the U.S. Public Health Service, the predecessor of the National Institute of Mental Health. He remained in that position until his retirement in 1944. During that time he was instrumental in launching such innovative programs as the psychiatric treatment centers for merchant seamen, the mental health screening program at the Coast Guard Academy, and public health training for mental health personnel. His administration

spanned the major portion of the trying World War II years. Dr. Kolb was promoted to the rank of Assistant Surgeon General in 1942.

Following retirement from the Public Health Service, Dr. Kolb became medical consultant to the California State Department of Corrections and, later, Deputy Director of the California State Department of Mental Hygiene. He retired from this position in 1951 and went to Norristown (Pa.) State Hospital as assistant superintendent; at the same time he served as secretary of the Philadelphia Mental Health Survey Committee until he retired to writing and consultation in 1954, at the age of 73. In 1965 he was awarded the Salmon Medal by the New York Academy of Medicine for his contributions to psychiatry and mental health.

A recital of the career of this remarkable man cannot communicate the warmly human side of his character or his vision, leadership, keen insight, and dedication to improving the lot of the mentally ill. Quietly forceful, he was an excellent organizer and administrator who inspired not only loyalty and respect but deep affection in his subordinates. He watched over and brought to professional maturity most of the career psychiatrists in the U.S. Public Health Service who occupied key positions during the early days of the national mental health program. While he was Chief of the Mental Hygiene Division he blazed the trail that made possible passage of the National Mental Health Act some years later.

There would be no national mental health program as we know it today had it not been for his pioneering efforts. Unfortunately, the time was not ripe for Dr. Kolb's concepts to be translated into legislation. His proposal for a National Neuropsychiatric Institution was endorsed by the American Psychiatric Association and the National Committee for Mental Hygiene, but other potent organizations lacked his vision and withheld their endorsement. Congress was not ready for a truly comprehensive national mental health program, but World War II taught the American people some bitter lessons about the human and financial cost of mental illness. The result was that, building on Dr. Kolb's ideas and the ground he had broken, those who followed him were able to accomplish what he had dreamed of and labored so hard for.

This man, who planted trees in whose shade he knew he would never sit, who played his seminal role quietly yet effectively, will always stand as a model for those who would aspire to leadership not only in psychiatry but in any field of human endeavor.

ROBERT H. FELIX, M.D.

Psychiatrists in the Ghetto

SIR: I appreciated Dr. William M. Bolman's detailed and forthright articles about "Community Control of the Community Mental Health Center" (August 1972 issue), but his very directness raised serious questions for me. Consider this: "It has been estimated that the mortality rate of ghetto community mental health center directors is close to 90 percent within a two- or three-year period. . . . Many, like myself, go back to teaching to lick their wounds and describe how it happened." Why did Dr. Bolman go back to teaching after only 18 months? That's not a very long time—hardly enough to know if you married the right person, probably an average time for psychotherapy to really get started, probably enough time to discover that a relationship is unworkable. Would a doctor interested in setting broken bones have this kind of trouble in the ghetto? Probably not. Why does the mental health movement seem to be having so much trouble? Maybe it is because it has nothing to offer the ghetto.

I have a naïve belief that people will in some way appreciate what you do *for them*. If they are not appreciating it, I wonder if it is for *them*. Does the ghetto need or want to learn what the mental health movement has to teach?

Dr. Bolman talks of the problems mental health professionals meet in the ghetto: the challenge to professional control, the intensity of community involvement, the difficulty in changing to new service settings and approaches. Would a competent reading teacher resent a challenge to his professional control? Would he resist intensity of involvement on the part of his students? Would he have any trouble teaching in different settings? No, he would encourage challenge, intensity, and change because they all represent student involvement, which is the heart of learning. As far as I am aware, all that is required for learning and teaching is the presence of two active minds.

But if the teacher has an uncertain focus, if he is unsure of his subject matter and of his relationship to his students, then he will worry about challenges to his control and about variability of setting. I think this is the position of psychiatry in the ghetto.

To quote Dr. Bolman again: "Irrationality tends to flourish in such a setting, and the usual work pleasure from experiencing a good job well done simply vanishes. In its place, and for extended periods of time, comes whatever joyless satisfaction derives from survival in a tough job that needs doing." Does such a joyless job really need doing?

I have a simple answer to why Dr. Bolman left after 18 months—the people in the ghetto didn't want to learn what he had to teach, and it took him that long to realize it.

PETER A. ROEMER, M.D.
Silver Spring, Md.

Dr. Bolman Replies

SIR: Dr. Roemer raises several valid questions that my articles apparently didn't clarify. Although he offers his own answers, I'm grateful for the opportunity to say how things looked to me. First, why did I go back to teaching after 18 months? Because I took Harry Truman's advice on politics: "If you can't stand the heat, get out of the kitchen!" I found that I simply couldn't stand the heat. In other words, it became clear that the range of activities and skills required, the painfully limited resources relative to need, the intensity of the struggles, the hours required, etc., were beyond my ability to manage. It might be of interest to note that in my own case, at least, the conflicts with the community could be worked out much more productively than the conflicts with the various medical and psychiatric elements (e.g., private practitioners, the medical society, the hospitals). I believe these conflicts existed because the medical elements did not generally wish to change the existing structure unless this was done on their terms; hence they perceived me as a threat or aggravation and tended not to cooperate. The community, on the other hand, had nothing to lose and hence saw me as perhaps being helpful and worth a trial.

Second, Dr. Roemer asks: "Would a doctor interested in setting broken bones have this kind of trouble in the ghetto?" The experience of those who have tried (1) says that the answer is yes. If that doctor needs to make a living (ghetto dwellers can't afford private practice fees), or believes he is a gift to the ghetto, or has trouble relating to the poor, to blacks, etc., he'll have lots of trouble! More basically, however, the problem is not so much that of individual doctors, but rather, of the absence of a rational delivery system.

Third, Dr. Roemer wonders if the ghetto needs or wants what the mental health movement has to teach. I wonder too. Most mental health teachings and practices are so oriented toward middle-class white-values that they don't have much use in this setting (2). Further, a good case could be made for the proposal that the ghetto doesn't need psychiatrists, but it needs a revitalization of the Bill of Rights—jobs, opportunity, housing, safe streets, relief from oppression. Or, to say it differently, it needs political and societal cures, not psychiatric cures. However, if you rephrase the question to read: "Do people in the ghetto need, desire, and appropriately use mental health services?" the answer is an unqualified yes!

Fourth, would a competent reading teacher resent a challenge to his professional control, etc.? Dr. Roemer says: "No, he would encourage challenge, intensity, and change because they all represent student involvement, which is the heart of learning." If so, psychiatry has lots to learn from reading teachers, because I know a lot of psychiatrists who *don't* encourage challenge, intensity, change, and involvement! I entirely agree with the other part of his point, that mental health has ridden so madly in all directions that now we're quite lost. Re-sorting, reevaluating, and choosing priorities, roles, and functions out of the 1960s mental health explosion (largely due to the Community Mental Health Centers Act) will be a major challenge to the profession. I only hope that psychiatry is sufficiently up to the challenge to play a role in some of the decisions.

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WILLIAM M. BOLMAN, M.D.
Honolulu, Hawaii

Concomitant Imipramine and Methylphenidate Administration: A Case Report

SIR: Perel and associates (1) and Wharton and associates (2) described the elevation of plasma imipramine (Tōfranil) levels when methylphenidate (Ritalin) was administered concomitantly.

We would like to describe here our experience with one patient who received high-dosage levels of imipramine and showed marked clinical improvement when methylphenidate was added to his treatment schedule.

> J.B., age 61, had a 19-year history of depressive disorder. Many treatment modalities had been attempted with little success, and he had been hospitalized continuously for the prior three years. Treatment with 300 mg. of imipramine a day resulted in some improvement, but he still required hospitalization. Within four weeks of adding methylphenidate (final dosage, 40 mg.) to the treatment schedule he showed marked improvement. Upon withdrawal of methylphenidate he rapidly returned to his previous state.

Imipramine and desmethylimipramine levels were determined on plasma collected four hours after the morning dose of medication. The method used was that described by Harris and associates (3) with some modifications. The samples were collected during baseline, at eight weeks (imipramine only), and then when methylphenidate was added (20 mg., later 40 mg.) and subsequently withdrawn.

The plasma levels showed a marked increase in both the imipramine and the desmethylimipramine when the patient received methylphenidate: baseline imipramine, 30 ± 20 ng./ml.; desmethylimipramine, 200 ± 10 ng./ml. (four measures each). Later, methylphenidate plasma levels rose rapidly and steadily to a peak value of 575 ng./ml. and 300 ng./ml. of imipramine and desmethylimipramine, respectively. Within two weeks after the methylphenidate was withdrawn, the plasma levels had returned to the baseline values. The marked clinical improvement followed the same time course as the elevation of the plasma levels. This confirms the observation of Perel and associates (1).

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THOMAS B. COOPER, M.D.
GEORGE M. SIMPSON, M.D.
Orangeburg, N.Y.

Residential Treatment: Should It Be Concomitant with Family Therapy?

SIR: I must take strong exception to Dr. Paul M. Fine's statement that residential treatment "is a court of last resort for any system of family or child psychiatry" in his review of Kahan's book *Mental Illness in Childhood: A Study of Residential Treatment* (February 1973 issue).

Indeed, intensive residential treatment with concomitant family therapy is, rather, the treatment of choice for borderline and psychotic children and adolescents whose psychopathology in effect expresses profound failure of separation-individuation, in turn engendered by similarly profound parental and familial psychopathology (1–3). Very often the best and best intentioned therapeutic efforts are foredoomed if these youngsters are left with their pathogenic families. By the same token, unfortunately, many prestigious private and public residential facilities for youngsters operate with conceptually muddled programs that ultimately prove to be incapable of coming to grips with the enormity of the patients' and their families' essentially autistic nexus of relationships. It is basically for these reasons that seriously ill youngsters continue to receive short shrift from both outpatient and inpatient facilities purportedly devoted to treating and to curing them.

Finally, I wish to know what Professor Fine means by "system of family or child psychiatry," particularly since he refers to residential treatment as a court of last resort for it, whatever the latter phrase may mean.

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DONALD B. RINSLEY, M.D.
Topeka, Kans.

Dr. Fine Replies

SIR: I believe that Dr. Rinsley and I are essentially in agreement, falsely polarized, perhaps, by a literary allusion. By a "court of last resort" I did not mean to imply that residential treatment is, or should be, the last resort for individual patients for whom residential treatment is indicated. The court of last resort was meant to allude to a therapeutic setting designed well enough to "do justice" to even the most difficult cases. Too often these patients are shunted into programs that are ill equipped to deal with them. By a "system of family and child psychiatry" I hoped to convey the idea of competent services coordinated to meet a broad spectrum of needs and therapeutic indications, including prevention, casework, case finding, outpatient treatments, day hospitals, residential treatment, rehabilitation programs, and follow-up.

Intensive residential treatment centers, as Dr. Rinsley correctly points out, are in some cases the only setting that can do justice to a variety of difficult situations. The fact that they exist also strengthens work in other less intensive settings throughout the entire system of care. Dr. Kahan's book seemed significant since it contained some practical guides toward setting up that most scarce of clinical resources—an intensive residential treatment center for preadolescent children.

PAUL M. FINE, M.D.
Omaha, Neb.

Statements About Viet Nam: APA's Role

SIR: What an intellectual pleasure to read the Letter to the Editor of Dr. Virgil M. Cox, Jr. (January 1973 issue). I wonder why so many righteous leaders in our specialty were so upset in

1972, when from 1962 through 1968 they seemed to be cheerfully developing community mental health programs while the Kennedy and Johnson administrations shipped hundreds of thousands of young men to Viet Nam. How come they are so overwhelmed and horrified in the 70s? Did they have to wait for a change in administration?

It pains me to hear a professor of a postgraduate course at Columbia University making fun of our President and implying that the people of this land are "sick" because they voted for Mr. Nixon. I believe that if we "educated people" don't show respect for our government, then what do we expect our children to respect? They, the "unenlightened ones," are inviting disaster, and I am afraid I shall be a witness to it.

Quoting Dr. Cox, "I wonder how everyone else feels?"

HECTOR CORRAL, M.D.
Long Branch, N.J.

SIR: I am in complete agreement with the ideas expressed in Dr. Cox's letter, in which he expressed his dismay at the statements made about Viet Nam by some of our members in business and scientific sessions at the annual meeting.

I, too, am disturbed at the idea of our association being used by some members as a platform for the expression of extreme left-wing liberal political ideology. I am convinced that in the long run such behavior will not only harm the image of psychiatry as a whole, but will also be detrimental to the credibility of APA.

In conclusion, let me state that in my opinion psychiatrists as professionals cannot fairly claim to have more expertise or insight into political issues than responsible members of other professions. Therefore, I do not feel that APA as an organization should write position statements on the conflict in Southeast Asia or on the solution of other political issues. I am strongly convinced, however, that it is the duty of each individual psychiatrist, whether he be liberal or conservative in his political convictions, to seek to influence government decisions by writing to senators, congressmen, etc., and by expressing these convictions when suitable opportunities occur.

WALTER C. JOHNSON, M.D.
Hanover, Mass.

Succinylcholine in EST

SIR: About 20 years ago my associates and I published one of the first papers on the use of succinylcholine in electroshock therapy (1). Since that time, there appears to have been relatively little advance in electroshock therapy.

For years we have noticed that some patients who make little, if any, response to shock treatment (curative response) often experience an incomplete seizure. The seizure is either brief in duration, is partial, or ends abruptly. Occasionally, a patient may not have a seizure at all. If a large amount of succinylcholine is used, the psychiatrist might not even be aware of a deficient seizure. Seven or eight years ago we started giving intravenous pentylenetetrazol (Metrazol) to enhance the seizure in these patients.

The average patient is given 8 cc. of a ten-percent solution of sodium methohexital (Brevital). The needle is left in the vein and the syringe is removed. Twenty to 80 mg. of succinylcholine, depending on the patient, is then administered. Again the needle is left in place and the syringe removed. Five to 8 cc. of pentylenetetrazol is promptly administered intravenously.

After a wait of approximately one and a half minutes, during which time the patient is given positive-pressure oxygen, treatment is then given. The average dose of pentylenetetrazol is 5 cc., but we are not hesitant to increase this dosage if indicated. The pentylenetetrazol does not arouse patients, and they receive excellent treatments. We have seen neither delayed seizures nor status epilepticus. By using succinylcholine the seizure is little more pronounced than in an ordinary successfully administered electroshock treatment.

I believe that it is well known that intravenous diazepam (Valium) is probably the best medication to use in terminating status epilepticus. Occasionally one will encounter a patient who, while recovering from the administration of an electric treatment, becomes highly disturbed. This is similar to the state of a patient in the first stage of anesthesia. It occurs whether or not a patient has had pentylenetetrazol. We have found that the administration of 1 to 2 cc. (5 mg. per cc.) of diazepam intravenously is a superb quieting agent. In such cases the diazepam is given immediately after the effects of succinylcholine have worn off. Intravenous diazepam tends to depress respiration, and for this reason, patients should be kept in the treatment room until respiration is well established.

Often the same dosage of diazepam seems to prevent, or minimize, posttreatment headaches.

I am writing this letter in the hope that others may find our experience helpful.

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CORBETT H. THIGPEN, M.D.
Augusta, Ga.

Sexual Freedom in Adolescents: A Reaction Formation?

SIR: One questions whether the so-called sexual freedom of adolescence is really what it appears to be. In conjunction with this sexual freedom there is also a freedom of homosexual behavior. This exposes the adolescent during the developmental stage of seeking a heterosexual identity to all of the literature written by confirmed homosexual adults.

With the echoes of an earlier homosexual developmental stage still reverberating, could this sexual freedom be a reaction formation to the anxiety created? Could this be a "driven" behavior or a protest against homosexual stirrings rather than a healthy heterosexual adaptation?

I have observed several adolescents assume a homosexual identity on the basis of reading literature by confirmed homosexuals without ever giving themselves a relaxed heterosexual experience for comparison.

Many of these young people do not know that latent homosexual responses (or active homosexual behavior) do not preclude a rewarding, mature heterosexual adaptation.

W.V. HEMPEL, M.D.
Alton, Ill.

Danger of Depot Phenothiazine Treatment in Acute Psychosis

SIR: In their article "Depot Phenothiazine Treatment in Acute Psychosis: A Sequential Comparative Study" (January 1973 issue) Drs. Chien and Cole advocate the use of depot phenothiazine in the treatment of acute psychosis. At the

present time I have a hospitalized patient who was treated this way at another hospital. The patient currently has a white blood count and differential of 5,000 WBC, 3 STABS, 16 SEGS, 74 lymphocytes, 3 monocytes, and 4 eosinophils.

Perhaps it would be more prudent and safer to be concerned about the development of serious hypersensitive reactions and to allow patients a three-week trial on an oral form of the drug before starting on an intramuscular route. It seems to me that hypersensitive reactions to almost any substance can develop and that to start with an irretrievable, oil-suspension, intramuscular injection is not using the basic logic of pharmacology.

JOHN B. SCHOONMAKER, M.D.
Syracuse, N.Y.

Drs. Chien and Cole Reply

SIR: Dr. Schoonmaker describes a patient with borderline leukopenia, apparently without other symptoms, who had received fluphenazine enanthate. He then questions whether it is ever wise to start patients on a long-acting injectable phenothiazine without a prior trial on an oral form of the same drug.

His position is logical, cautious, and conservative. All we can say by way of rebuttal is that neither we nor the manufacturers of the long-acting injectable drug are aware of any instances of toxicity or hypersensitivity that are clearly attributable to the drug. Two case reports of hyperthermia in patients who had received the enanthate have been reported, but the patient in the case most recently reported (1) ended up being maintained on the enanthate without further toxicity. Dr. Schoonmaker's case report would not deter us from giving the drug as an initial therapy if we felt the clinical situation warranted it. The drug form is useful on an acute service and is uniquely valuable in crisis intervention in the home or in the emergency room to prevent the psychiatric hospitalization of psychotic patients.

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CHING-PIAO CHIEN, M.D.
JONATHAN O. COLE, M.D.
Boston, Mass.

Dependence in Man: A Psychoanalytic Study, *by Henri Parens, M.D., and Leon J. Saul, M.D. New York, International Universities Press, 1971, 251 pp. $10.*

Dependence has come to have a pejorative connotation in psychiatric practice. When it is discovered in our patients, it is a defect to be exorcised. The authors' contribution is to treat dependence as a normal human condition with its own epigenesis. "When we speak of dependence we mean the need each human has, whether child, adolescent, or adult, for a libidinal object relation in order to ensure his optimal psychic functioning."

The first part of this book reviews Freud's writing on childhood, with its lengthy period of helplessness and dependence. These are then related to the early prototypical danger situations that produce anxiety: 1) fear of loss of the symbiotic object that gratifies dependency needs and 2) fear of loss of the object's love that follows the libidinal object tie, which in turn motivates identifications leading to instinctual repression and promoting the formation of psychic structure. Freud postulated that "the libido attaches itself to the satisfaction of the great vital needs, and chooses as its first objects the people who have a share in that process." This serves as the basis for the second part of the book, which deals with theoretical considerations. Here the authors differentiate this view from that of the British analysts (Balint, Fairbairn, Guntrip, Bowlby) and the ethologists who argue for primary object attachment in the newborn human (and, by implication, from the theories of Robert Sears, who considers dependency a primary motivating force in the newborn).

The authors cogently discriminate between two groups of animal species: those whose neonates are altricial and those with precocial neonates. Animals in the first group, including the human, are born with an immature nervous system with less capacity to perceive, to execute motor acts, and "also, the less operative those potential instinctual structures that subserve the development of object relations." Here the authors follow Spitz, Anna Freud, M. Schur, and most child psychoanalysts, who hold that a level of perceptual and emotional motivation and differentiation—a psychological organization or intrapsychic structure—is a prerequisite for object relations. According to this view the maximum intensity of psychologic dependence (an emergence of clinging behavior in response to separation anxiety) appears just after six months of age, when the object acquires specificity for the child and the process of separation-individuation begins. The more altricial the organism, the more will dependence become a factor in early life experience and the more will maternal care be required for survival.

In contrast are those species (e.g., geese, ducks) whose neonates are precocial, born in a state of central nervous system maturation that allows for a significant degree of cognitive, affective, and motor functioning. In these species, unlike the human infant, there is neonatal imprinting, with rapidly secured object attachment. Experimentally, the neonate can attach to an out-of-species object.

Using a "developmental line" model based on the work of Anna Freud, Mahler, and Erikson, the authors formulate in chapter 5 "an epigenesis of psychologic dependence" from birth to late adulthood. They find it useful to divide libidinal needs of each stage into two components: affectional and sensual. "Affectional" refers to the necessary psychic nutriment derived from object relations: emotional support, protection, and care. Brief clinical examples in the final chapter illustrate dependence as a defense as well as defenses against dependency needs.

The style of the book is uneven. The various sections of the book form different styles and paces as if the two authors put together separate essays. Even so, this is a useful book, placing dependence as an independent variable in human development. It is a contribution to both theory and practice.

ROBERT D. GILLMAN, M.D.
Washington, D.C.

Sigmund Freud and Lou Andreas-Salomé: Letters, *edited by Ernst Pfeiffer. New York, Harcourt Brace Jovanovich, 1972, 242 pp., $7.95.*

In 1911 Lou Andreas-Salomé, at the age of 50, attended the Psycho-Analytical Congress in Weimar and was captivated by Freud and psychoanalysis. A year later, a correspondence that was to last a quarter of a century began with a letter from Lou Andreas-Salomé to Freud expressing her delight that he had responded favorably to her request to come to study with him in Vienna. Her interest in psychoanalysis was the culmination of a search begun in her teens to find a way to synthesize passion and intellect, mind and body, faith and love.

The sensitive, introspective only daughter of a religious Russian general of German Huguenot origin, she had in her early teens turned away from life to a world of fantasy. In an attempt to find her way back through spiritual understanding, she sought at the age of 16 instruction in religion, art, and philosophy from a pastor in her native St. Petersburg. Following her disenchantment when this man of God, 25 years her senior, proposed marriage to her, she became ill.

At the age of 20 she journeyed to Rome to recuperate and there began her contacts with many of the great writers and intellectual personalities of her time. She traveled widely and numbered among her friends persons like Tolstoy, Strindberg, Rodin, and Schnitzler. She was particularly close to Nietzsche and Rilke. The impact she made, the experience she had, and the impression she left varied. Some men admired her and were friendly. Others admired and adored her and were her lovers, and still others admired, loved, and were hurt by her. At 26 she married F.C. Andreas, a noted philologist who became a professor at the University of Göttingen. Their marriage lasted 50 years but was not a sexual union.

Lou Andreas-Salomé had achieved a reputation as a novelist and essayist when, at the age of 50, she undertook the formal study of psychoanalysis. She considered this move a turning point in her life and thought of Freud as the father figure who presided over her life. She remained in Vienna for approximately one year and then returned to Göttingen where she practiced psychoanalysis and from whence most of the letters were written. She rarely left Göttingen, and her contact with Freud was maintained largely through mail.

Much of the correspondence deals with interchanges about her reactions to Freud's writings. Although she was most respectful of what he had to say, she did not always agree with him. While he emphasized analysis and attention to detail and logic, she tended to make broad generalizations and attempted

syntheses that Freud often considered premature. He admired her perceptiveness and poetic insight into such subjects as narcissism, sublimation, religion, and masochism, but at times he gently chided her for the lack of clarity in her arguments and for making assumptions not warranted by the available data.

These letters contain much more than an exchange about theoretical ideas. There are references to many of the important figures in psychoanalysis and insight into the substantive issues as well as the personality clashes that influenced the development of psychoanalysis and its ramifications. Their letters express their concern for each other's welfare and the welfare of their families during a historical period of great anxiety and deprivation. They share their pleasure in the achievements of Freud's daughter Anna, who had become Lou's good friend. Freud responded to Lou's request for advice about problems she encountered in the course of her work with her analysands. Freud was cheered by her optimistic outlook, which contrasted with his own pessimism not only about his failing health but the future of mankind.

At the present time, when Freud's concepts of female psychology are being so widely discussed and challenged, this book affords an interesting insight into the complexity of Freud's attitude toward women. He was obviously attracted to this beautiful woman whose experiences had been so intriguing, and he was also pleased by her admiration, almost adoration, of him. To what extent these factors motivated his encouragement of her career in psychoanalysis is hard to determine, for it is also clear that he admired her intelligence, which sometimes baffled him. He referred to her intelligence as "exquisitely feminine" in its efforts to "tidy everything up." While at times his responses to her speculative and obscure theorizing were patronizing, he also wrote of her "superiority over all of us in accordance with the heights from which you descended to us." Never did he demean or disparage her, but rather he encouraged her to continue to work and explore her thoughts.

REBECCA Z. SOLOMON, M.D.
Hartford, Conn.

Urban Challenges to Psychiatry, *edited by Lawrence C. Kolb, M.D., Viola W. Bernard, M.D., and Bruce P. Dohrenwend, Ph.D. Boston, Little, Brown and Co., 1969, 496 pp., $15.*

This work sums up what 14 members of the faculty of the Department of Psychiatry of Columbia University College of Physicians and Surgeons in New York learned from the community and from each other during more than a decade of mutual experience in developing psychiatric services for 100,000 people packed into a small geographic area of Manhattan.

As should be hoped of a service program developed by a university medical center, throughout the project the group held before itself high standards of objectivity and documentation as it set about learning, recording, scrutinizing its results, and relearning how to provide effective psychiatric services in a model district of urban core life.

The contributing authors approach this challenge from several disciplines and varied perspectives as clinicians, administrators, and researchers. The red thread giving this work its particular identity through time and multiple viewpoints is Lawrence C. Kolb, who opens the volume with a chapter on "The Concept of the Community Mental Health Center" and closes it with a chapter on "Search and Research." Professor Kolb also shores up the middle of the line with chapter 8 on "Medical and Psychiatric Services" and chapter 10 on "Failure in Bureaucratic Organization and Hope from Local Action," as well as having a share in other contributions to the book.

Counterpoint to the chapters on the evolution of clinical concepts and programs starts with chapter 3, "A Social History of Washington Heights to 1960." It provides the background for a number of chapters by sociologist Bruce P. Dohrenwend, who, along with others, describes the development of their attempts to answer the big question: "What effect did all these programs have on the people in Washington Heights?" The reader will not find the much-sought-after answer to that question by turning to the last chapter, but he will find a very realistic and sophisticated statement of the current state of the art in Professor Dohrenwend's chapter 19, "The Challenge in Retrospect and Prospect: A Research-Oriented View."

While the knights of community psychiatry do not present us with the Holy Grail in this work, they have a great deal to tell us of what they have learned, their mishaps and adventures, in the quest. Some of this will not be interesting to everyone, but all of it should be fascinating to some. Is your academic department thinking of running a health program for the public? Read chapter 13 on "Urban Psychiatry—Effects on the Psychiatric Institute: Some Comments on the Dynamics of Institutional Change" by Alvin M. Mesnikoff. Or maybe your mental health center serves a population that does not believe in mental illness. In Washington Heights not many people did either, but what is fascinating is that community leaders, regardless of their politics, were well aware that some of their constituents had mental abnormalities and needed treatment.

Clinical points, as well, received scrutiny. Continuity of care is a principle applauded in all branches of medicine. Yet as the principle was applied in the Washington Heights study, it led, beyond dispute, to marked increases in the duration of psychiatric hospitalization.

Repeatedly throughout this work it is evident that research on program quality and program effectiveness was frustrated by the impact of mental health systems outside the Washington Heights area on the lives and illnesses of the study group within the area. We are all quite familiar with the complexity of the variables, the many social institutions and forces that influence people's behavior and that are beyond the scope of psychiatric treatment systems. What this work makes vividly clear is that as patients over a period of time passed through a variety of municipal and state treatment systems other than those of the study district, often for quite arbitrary reasons, the quality of care provided by each of these systems probably deteriorated, and certainly nobody knew what was going on.

The psychiatric services provided in Washington Heights, and their evaluation, are not the only pattern for urban mental health programs, or necessarily the best, but we must be grateful for the high-caliber documentation and the thoroughness and objectivity of the research that have been provided in this unique communication. It is an achievement for a comprehensive mental health program to survive in an urban core, without the additional burden carried by these authors of documenting, studying, and reporting on their experiences every inch of the way.

J. BARRY DECKER, M.D.
San Francisco, Calif.

Prisoners of Psychiatry: Mental Patients, Psychiatrists and the Law, *by Bruce Ennis. New York, Harcourt Brace Jovanovich, 1972, 232 pp., $6.95.*

Bruce Ennis is uniquely qualified to write about the injustices

of certain forms of involuntary psychiatric hospitalization. For the past four years he has served as director of the Civil Liberties and Mental Illness Litigation Project of the New York Civil Liberties Union, and he has devoted his full time to test case litigation on behalf of mental patients. In this book he not only acknowledges the help of many dedicated, if not heroic, psychiatrists in the difficult, truly landmark cases he has struggled with, but (unusual in a work of this type) he clearly identifies, perhaps unwittingly, the reasons for our bankrupt system of involuntary institutionalization and makes constructive proposals for correcting it. Our laws and their administration, not psychiatry or psychiatrists, are attacked with vigor and logic.

The introduction, written by the well-known anti-psychiatry psychiatrist Thomas S. Szasz, detracts from the quality and value of the book. Szasz exhales fire and thunder and lashes out his usual stinging denunciation of his colleagues, this time singling out (the reader can theorize why) the revered Karl Menninger as "one of the staunchest and most influential psychiatric supporters of involuntary mental hospitalization." Naturally, mental illness is still a metaphor and a myth and mental hygiene laws should not be updated but repealed.

Like Szasz, the author has a naïve, if not cavalier, view of major mental disorders. But his epilogue, in which he highlights the shoddy thinking that underlies the inappropriate and harmful handling of large numbers of mentally ill patients, is provocative, and because it is reasoned and in good taste, it deserves serious consideration by psychiatric and legal scholars. It is refreshing to read not the nihilistic, destructive "solutions" of Szasz, but concrete and, I believe, workable recommendations.

Long-range reform proposals include limiting the application of the "danger" standard for commitment to persons who have recently committed or threatened substantial physical injury to themselves or to others (this has already been adopted in several states, most recently New York State); requiring hospitals to show that they provide something more than the same food, clothing, shelter, and structured environment one finds in a prison; and abolishing patient labor or requiring hospitals to pay fair value for that labor. The author outlines short-range reform measures, most notably the mandatory assignment of counsel and a mandatory judicial hearing (unless affirmatively waived by the patient after consultation with his counsel) either before or promptly after hospitalization.

I have the feeling that Mr. Ennis would be astonished to know that his views are far more likely to be favorably received and supported by the leadership and membership of the American Psychiatric Association than by their counterparts in the legal profession.

If one can disregard the irrelevant, demagogic, sophistic, anti-psychiatric diatribe in Dr. Szasz's nine-page introduction, the book should be considered must reading by lawyers and mental health professionals alike. Retitling it *Prisoners of Judiciary—Mental Patients, Judges, Lawyers, and the Law* would facilitate its acceptability in this regard. The book should be published in paperback so that it can be read widely by laymen as well.

A.L. HALPERN, M.D.
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Society Pays: The High Costs of Minimal Brain Damage in America, *by Camilla Anderson, M.D. New York, Walker and Co., 1972, 228 pp., $6.95.*

The title of this book clearly conveys the author's thesis: that minimal brain damage (or dysfunction) is an extremely common disorder which is largely responsible for a wide variety of psychiatric and social pathologies. Dr. Anderson first states that the minimal brain damage (MBD) syndrome, produced by either neurological noxae or a genetic phenocopy, is responsible for an appreciable fraction of the behavioral pathology and cognitive difficulties of childhood. Available data would suggest that approximately five to ten percent of latency age children do indeed suffer from a mélange of overlapping signs including overactivity, coordination deficits, impulsivity and social immaturity, and a variety of perceptual and cognitive deficits variously labeled according to their severity and patterning as hyperactivity, minimal brain dysfunction, perceptual-motor problems, specific learning disabilities, and dyslexia.

Whether this diverse group of psychological signs forms a true syndrome or whether, like retardation, it represents the lumping together of etiologically and phenomenologically discrete subgroups is currently a matter of investigation. Evidence does exist that such behavioral abnormalities can occur on the basis of true neurological injury or fetal maldevelopment, and that they probably can be produced by genetic factors and possibly by deviant psychosocial experience. That the entire syndrome occurs on the basis of brain damage is unlikely, and the meaningfulness of grouping these children together is problematical. The author believes that it is useful to so cluster these individuals, and she includes in the syndrome—as most researchers working in the field would not—an indefinite subsample of Bleuler's group of schizophrenias. She thus broadens the concept of MBD to an extent not generally employed by other workers in the field.

Her second major assertion—again supported not by hard data but by her clinical hunches—is that the syndrome is not outgrown in childhood but persists into adult life, where its manifestations become protean. She believes that MBD "matures" into psychosis, sociopathy, "inadequacy," and a multitude of hitherto undesignated psychiatric nonspecificities. Documentation for such an assertion could consist of evidence that a disproportionately large number of persons falling into these diagnostic categories had manifested typical signs of MBD in childhood or that follow-up studies of children with MBD revealed that such outcomes constituted part of the natural history of the disorder. Such documentation is not provided.

The above summarizes the author's two major theses. They are advanced on the basis of her clinical experience alone, and she provides none of the evidence necessary to support her extreme position. With regard to the etiology of such MBD problems in childhood, the role of neurological factors is unclear. One of the major concerns of the multimillion-dollar perinatal study of the National Institute of Neurological Diseases and Stroke is to evaluate the role of biological factors in the production of such abnormalities in childhood. The role of genetic factors, too, remains unclear. Clinical experience may suggest that the disorder runs in families, but the perennial problem of interpreting such findings is in separating the roles of genetic and experiential factors.

The methodological strategy necessary for this purpose is that of adoption studies. Such studies have been employed in the schizophrenias and are beginning to be explored in the affective disorders, sociopathy, alcoholism, and MBD itself. With the exception of the schizophrenias, studies of these disorders have not been completed, so that the role of genetic factors in their etiology still remains unproved. However, two recent adoption studies of MBD are consonant with a genetic hypothesis. In regard to follow-up studies of children with MBD and retrospective analyses of adult sociopaths and psychiatric nonspecificities, there is some literature that would bolster Dr. Anderson's opinion, but she does not cite it.

Relatively recent follow-up studies have shown that children with MBD run a higher risk of schizophrenia (Robins, Menkes) and sociopathy (Robins, Mendelson, and Stewart). Retrospective data suggest that there is a childhood history of MBD-like behavior among impulsive adolescents (Hartocollis, Quitkin, and Klein) and that children with MBD are grossly overrepresented among high school underachievers (Hammar). It may very well be that in many instances MBD is a chronic disorder and one not limited to childhood, but the data currently available are suggestive, not conclusive. In an effort to substantiate her beliefs, the author calls upon a potpourri of ambiguous circumstantial evidence whose major effect, unfortunately from her standpoint, is not to strengthen her argument but to lay open to question the validity of her clinical judgment. Her attempt to document her position with such fragmentary data is unfortunate because her book may contain an extremely useful clinical hunch or, as it is more fashionably called these days, a hypothesis-generating thesis.

In summary, Dr. Anderson has made some rather sweeping assertions on the basis of clinical experience rather than hard data. There may be a very large element of truth in what she says, but her attempts to substantiate her beliefs are unsuccessful. This weakness, together with her outspoken assertions that psychosocial *krankheiten* are the products of biological deficits rather than social and psychological oppression—a view contrasting sharply with the prevalent mood of social, not biological, meliorism derived from Locke—will combine to make this book one that is rejected out of hand and not read. This will be unfortunate because it is quite likely that the author does have some useful clinical hunches, and it will be unfortunate if the baby—however small—is thrown out with the bath water.

PAUL H. WENDER, M.D.
Bethesda, Md.

Compensation in Psychiatric Disability and Rehabilitation, *edited by Jack J. Leedy, M.D. Springfield, Ill., Charles C Thomas, 1971, 348 pp., $15.*

This excellent book by several authors from many disciplines should be a reference volume for all of us who must deal with this perplexing and difficult problem. It crystallizes the fact that there must be a meeting of minds among psychiatric, psychologic, sociologic, legal, insurance, and rehabilitation interests so that the primary goal of rehabilitation to the fullest possible degree (including, it is hoped, return to a job) can be realized—and not crucified on the cross of special interests and vague and inconsistent psychiatric and legal definitions. Compensation should not be the primary goal. There should be early referral to a psychiatrist following any injury or incident on the job—especially when nothing organic can be found, but also because the attending physician should always be aware of the possibility of attendant emotional and personality factors.

My many years in private and industrial practice and involvement with national and state rehabilitation councils and agencies and with insurance companies have impressed on me these points:

1. Rehabilitation must be a written policy in any workmen's compensation program, to begin on a certain day following the injury or incident. Tough steps must be taken to check on the R aspect (rehabilitation) in the progress of the case to be sure that the patient receives total rehabilitation—physical, psychiatric, psychologic, family counseling, retraining for a job, etc.

2. Insurance companies have complained that psychiatric referrals are not made early or often enough to be effective in early detection and treatment of psychiatric complications.

3. Education of all medical and paramedical personnel involved in the case should be continuous regarding the possibility of emotional and personality complications, and they should refer their suspicions to the medical person in charge.

4. Vocational rehabilitation agencies should be involved early. Because the late Mary E. Switzer had the foresight to establish psychiatric training programs for rehabilitation counselors, these agencies can be very helpful in the restoration process of psychiatric patients.

The following chapters are especially worth reading: "Economic Factors in Psychiatric Treatment and Rehabilitation" by Talkington, "Differentiating Compensation Factors from Traumatic Factors" by Ross, "Occupational Risk Factors in Mental Health and the Impact of Role Change Experience" by Trice and Roman, "Compensation for Psychiatric Disorders" by Brill, and "Rehabilitation—A Key to Adequate Recovery in Personal Injury Cases" by Broder. The insurance carriers' viewpoints concerning reemployment and new employment of the mentally restored following an employment injury or incident would have been helpful. In view of General Motor's Carter case (1), Norman Brill's statement is reassuring: "The flood of cases feared as a result of the precedent set by the Carter case apparently has not occurred." This decision could have been a difficult obstacle in influencing employers to hire the mentally restored.

REFERENCE

1. Carter v General Motors Corporation, 361 Mich 577, 106 NW 2d 105, 1960

RALPH T. COLLINS, M.D.
Hilton Head Island, S.C.

The Neuroses: A Psychoanalytic Survey, *by P. C. Kuiper, M.D., Ph.D. New York, International Universities Press, 1972, 251 pp., $9.*

This is the English translation of a textbook for students of psychoanalytic psychology by a Dutch psychoanalyst and clinical psychiatrist who has been a visiting professor at the Menninger Foundation.

It is much more concise than Fenichel's *The Psychoanalytic Theory of Neurosis* (1) and it may prove to be a useful successor to that book at least until the rumored revision of that text has been produced. Although Kuiper's book includes less detail than Fenichel's, it presents relatively more clinical orientation in comparison with the theoretical elaborations in Fenichel's accounts of neuroses.

In his introductory and theoretical chapters Kuiper emphasizes that nosological and dynamic-genetic considerations are *both* valuable and not mutually exclusive. In his chapters on the various neuroses and neurotic character disorders he relates his psychoanalytic discussions to the clinical entities of European psychiatry, which have again been accepted in the official American nomenclature (2). For example, he includes various types of hysterical neuroses and hysterical personality and also neurasthenic, depersonalization, and hypochondriacal neuroses. He also includes a Kretschmerian "sensitive personality" but fails to mention some of the other personality disorders that are in the American nomenclature and that might be considered to be related more to the psychoses than to the neuroses.

In my opinion the author is rather sparing in his account of depressive neuroses and seems not to recognize a possible relationship between neurasthenia and depression. He is skimpy in

details about traumatic neurosis, although he does make the important distinction between the sequelae to traumatic anxiety and the conditions associated with secondary gain, which he calls "pension neurosis." The sections on hysterical neuroses, in which he differentiates between these disorders in males and in females, and the section on obsessive-compulsive neurosis include more enlightening detail.

The main shortcoming of this translation, published in 1972, is that there are no references to the literature subsequent to 1962. The book would be vastly improved as a modern psychoanalytic textbook if it included ideas from such theoreticians in psychopathology as Arlow, Balint, Brenner, Nagera, Nemiah, Kohut, Sandler, and Winnicott, to name only a few.

Nevertheless, this book can be highly recommended as a textbook for beginning students of psychoanalysis, who should be trying to relate their dynamic-genetic formulations to clinical psychiatric diagnostic classifications.

REFERENCES

1. Fenichel O: The Psychoanalytic Theory of Neurosis. New York, WW Norton & Co, 1945
2. American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders, 2nd ed. Washington, DC, APA, 1968

W. DONALD ROSS, M.D.
Cincinnati, Ohio

Annual Progress in Child Psychiatry and Child Development: 1972, *edited by Stella Chess, M.D., and Alexander Thomas, M.D. New York, Brunner/Mazel, 1972, 732 pp., $15.*

The appearance of the fifth volume in this series prompts a look at the selective process and the quality of the papers included and also suggests a concern about the need for such an annual review. It is apparent that not only in this volume but over the years, Chess and Thomas have put together collections that are both catholic and of high caliber.

The papers included in this volume, as well as those in the earlier issues, range from articles concerned with special research topics to more specifically clinical and treatment papers. A survey of the material selected over the five-year period illustrates quite clearly changes of interest in various topics. The research areas covered concern infancy, various developmental issues, perception and learning, and specific concerns about handicapping conditions. It is obvious that there has been a great shift from articles concerned with pure treatment phenomena to a major interest in learning and developmental problems.

The articles in the present volume are indeed good. It was a pleasure to see Lester Mann's article on "Perceptual Training Revisited: The Training of Nothing at All." It was equally reassuring to read once more Barbara Fish's article on the "Myth of Stimulants in Hyperkinesis" as well as the more classical Eisenberg paper on "Principles of Drug Therapy in Child Psychiatry." Jane Knitzer's critique of advocacy represents a most important viewpoint on this currently spotlighted topic. The editors can also be commended for including Ritvo's article on "Social Class Factors in Autism." There does seem to be a contradiction between Birch's report on "Functional Effects of Fetal Malnutrition" and Schultz and Aurbach's somewhat different point of view in their article on "Usefulness of Cumulative Deprivation as an Explanation of Educational Deficiencies."

Having said that these are good articles and that the rest of the papers are of comparable quality—do we need such an annual review? All the material comes from readily available journals. The compilation suggests only minimal bias on the part of the editors. Certainly there is no attempt to present a digest that would downgrade the quality of the original papers. The collection is handy, but it could be prepared as easily and more cheaply by any reprint-minded individual.

The pattern of such review books is well established. Undoubtedly there will continue to be publications of this nature. Undoubtedly they will be helpful to librarians and individuals who lack access to a wide range of article materials. To those whose tastes range more widely, they may be a partial boon but perhaps an unnecessary one. There is, no doubt, solace in the minds of the authors in seeing their papers thus reprinted, but the collection of articles into a review volume can be questioned both in concept and in practice.

No doubt there are many advocates of this method of reviewing the literature. It is possible, however, that a more appropriate mechanism needs to be discovered. Science fiction continually suggests that we are on the verge of having readily available print-outs to scan on complex video machines. Science may be ready to provide us with these now, but cost keeps us locked into the printed page. Of these printed pages, there does seem to be a superfluity at all times. Perhaps our goal should be to avoid some of the repetition and redundancy in our publications.

HENRY H. WORK, M.D.
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This Month's Reviewers

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Books Received

This listing acknowledges the receipt of recent books. Books of particular interest to the readers of this journal will be reviewed as space permits, and copies of the reviews will be sent to the publishers. Books cannot be returned to the publishers.

Confrontation in Psychotherapy, *edited by Gerald Adler, M.D., and Paul G. Myerson, M.D. New York, Jason Aronson Book Publishers, 1973, 383 pp., $15.*

Selected Writings of Bertram D. Lewin, *edited by Jacob A. Arlow, M.D. New York, Psychoanalytic Quarterly, 1973, 586 pp., $15.*

Community Mental Health: A Historical and Critical Analysis, *by Bernard L. Bloom. Morristown, N.J., General Learning Press, 1973, 33 pp., no price listed (paper).*

Licit and Illicit Drugs, *by Edward M. Brecher and the Editors of Consumer Reports. Boston, Little, Brown and Co., 1972, 593 pp., $12.50.*

Eating Disorders: Obesity, Anorexia Nervosa, and the Person Within, *by Hilde Bruch, M.D. New York, Basic Books, 1973, 387 pp., $12.50.*

Psychotherapeutic Action of the Physician. Proceedings of the 4th International Congress of Psychosomatic Medicine, Paris, 1970, *edited by L. Chertok and M. Sapir. New York, S. Karger, 1972, 344 pp., $27.55.*

Personality Differences and Biological Variations: A Study of Twins, *by Gordon Claridge, Sandra Canter, and W.I. Hume. Elmsford, N.Y., Pergamon Press, 1973, 168 pp., $11.40.*

An Illustrated History of Brain Function, *by Edwin Clarke, M.D., and Kenneth Dewhurst, M.Litt., D.Phil., D.P.M. Berkeley, University of California Press, 1973, 149 pp., $14.*

The Controllers: A View of Our Responsibility, *2nd printing, by Jim Cole. Boulder, Colo., Shields Publishing Co., 1972, unnumbered pp., $2 (paper).*

Modern Techniques of Vocal Rehabilitation, *by Morton Cooper, Ph.D. Springfield, Ill., Charles C Thomas, 1973, 341 pp., $12.95.*

From Food to Fertilizer: The Role of Excrement in the Life Cycle, *by Charles Clay Dahlberg. Reading, Mass., Young Scott Books (Addison-Wesley Publishing Co.), 1973, 67 pp., no price listed.*

Human Sexuality and the Mentally Retarded, *edited by Felix F. de la Cruz and Gerald D. LaVeck. New York, Brunner/Mazel, 1973, 340 pp., $8.95.*

Licensed Mass Murder: A Socio-Psychological Study of Some S.S. Killers, *by Henry V. Dicks. New York, Basic Books, 1973, 274 pp., $7.95.*

Smoking Behavior: Motives and Incentives, *edited by William L. Dunn, Jr. New York, Halsted Press (John Wiley & Sons) (distributor), 1973, 295 pp., $9.95.*

The Language of Mental Health, *by William E. Fann, M.D., and Charles E. Goshen, M.D. St. Louis, Mo., C.V. Mosby Co., 1973, 132 pp., $5.95 (paper).*

Power, Greed, and Stupidity in the Mental Health Racket, *by Walter Fisher, Joseph Mehr, and Philip Truckenbrod. Philadelphia, Westminster Press, 1973, 173 pp., $5.95.*

Symbol, Dream, and Psychosis, *by Robert Fliess, M.D. New York, International Universities Press, 1973, 425 pp., $13.50.*

Abortion Bibliography for 1971, *compiled by Mary K. Floyd. Troy, N.Y., Whitston Publishing Co., 1973, 238 pp., $11.*

Challenge to Community Psychiatry: A Dialogue Between Two Faculties, *edited by Archie R. Foley, M.D. Morningside Heights, N.Y., Behavioral Publications, 1972, 203 pp., $10.95.*

A Psychoanalytic Study of the Psychoses, *by Thomas Freeman, M.D. New York, International Universities Press, 1973, 328 pp., $10.*

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Without Guilt and Justice: From Decidophobia to Autonomy, *by Walter Kaufmann, Ph.D. New York, Peter H. Wyden, 1973, 263 pp., $7.95.*

The Destiny of Europe's Gypsies, *by Donald Kenrick and Grattan Puxon. New York, Basic Books, 1973, 245 pp., $6.95.*

Caring for the Dying Patient and His Family: A Model for Medical Education—Medical Center Conferences, *edited by Dr. Austin H. Kutscher and Michael R. Goldberg. New York, Health Sciences Publishing Corp., 1973, 72 pp., $3.95 (paper).*

The Great Jackass Fallacy, *by Harry Levinson. Boston, Mass., Division of Research, Graduate School of Business Administration, Harvard University, 1973, 178 pp., $7.*

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The Abortion Controversy, *by Betty Sarvis and Hyman Rodman. New York, Columbia University Press, 1973, 217 pp., $8.95.*

The Do-It-Yourself Psychotherapy Book, *by Martin Shepard, M.D. New York, Peter H. Wyden, 1973, 178 pp., $5.95.*

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Minimal Cerebral Dysfunction in Children, *edited by Stanley Walzer, M.D., and Peter H. Wolff, M.D. New York, Grune & Stratton, 1973, 115 pp., $7.50.*

Only a Little Time: A Memoir of My Wife, *by Sidney L. Werkman. Boston, Little, Brown and Co., 1973, 235 pp., $5.95.*

Personality and Prediction: Principles of Personality Assessment, *by Jerry S. Wiggins. Reading, Mass., Addison-Wesley Publishing Co., 1973, 656 pp., $17.50.*

Interpersonal Explorations in Psychoanalysis: New Directions in Theory and Practice, *edited by Earl G. Witenberg. New York, Basic Books, 1973, 354 pp., $12.50.*

The Principle of Normalization in Human Services, *by Wolf Wolfensberger and Bengt Nirje, Simon Olshansky, Robert Perske, and Philip Roos. Toronto, Ontario, Canada, National Institute on Mental Retardation, 1972, 247 pp., $8.50, Canada; $9.50, outside Canada (paper).*

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Clinical Interpretation of the Wechsler Adult Intelligence Scale, *by Irla Lee Zimmerman, Ph.D., and James M. Woo-Sam, Ph.D., with Alan J. Glasser, Ph.D. New York, Grune & Stratton, 1973, 215 pp., no price listed.*

Summary Report of the Special Policy Meeting of the Board of Trustees, Atlanta, Ga., February 1–3, 1973

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THE PURPOSE OF the Special Policy Meeting was to consider ways and means of improving the policy planning function of the APA Board of Trustees. Although this function has long been recognized as the primary function of the Trustees, the pressures and complexities of acting on the ever-expanding amount of routine APA business in recent years has tended to erode it. How to clear more time to allow the Board to carry out its policy planning function was the focus of the agenda, which was developed by a subcommittee consisting of Drs. Melvin Sabshin, chairman, James Johnson, and Robert Gibson.

More specifically, the Trustees brought with them a common sense of the need to reassess the ever-changing structure of APA, the dynamics of the relationships among components that it has engendered, and the implications of these for coping effectively in developing policy and programs. For example, there are the matters of the maturation of the Assembly of District Branches in recent years and its telling role in formulating policy; of the growing importance of the Reference Committee of the Board; of the fundamental impact of the Committee on Constitution and By-Laws; and of the relatively new phenomenon of multiple slates of candidates for office, which dictates that some will be elected who have not previously been notably involved in APA affairs or who have not been part of the evolutionary process that has led to the current structure. The Trustees also brought a deep concern over the rampant criticisms that attend psychiatry today (both from without and within) and how best to deal with them.

This was the fourth Trustees' meeting of this kind. The first, known as the Airlie House Conference, was held in 1964, the second in 1968, and the third in 1971. Reports coming out of all of these meetings were published in the *Journal*.

Broadly speaking, the first day of the meeting was devoted to problems of internal organization and the second day to external policy issues and relationships. The meeting opened with a series of formal presentations followed by discussion. The meeting then broke into small group workshops where specific recommendations might be formulated and presented to a final plenary session for action.

INTERNAL AFFAIRS

The Role of the Trustees vis-à-vis Other Components

Dr. Ewald Busse, immediate Past President, made a number of major points in his presentation:

- The Reference Committee and the Committee on Constitution and By-Laws, both of which are relatively small and composed primarily of appointed individuals, have become increasingly influential in policy formation and in determining APA priorities.
- The unwieldy size of the Assembly limits its ability to act promptly on matters of immediate concern.
- The efficiency of the Board of Trustees fluctuates depending on the traits of its current members, the kind of material (medical, social, political, etc.) that is under consideration, and the type of decision-making process that is being utilized.
- APA is recognized professionally and legally as an educational-scientific organization composed of psychiatrists. It has five stated objectives. Therefore, all policies and procedures should be directly relevant to these objectives and to the structure of APA. We must keep this principle foremost in our minds, for if we do, it will expedite and clarify the decision-making processes of the trustees.
- Dr. Busse reviewed the constitutional status and definition of the Board of Trustees (established in 1969), its Executive Committee, the Reference Committee, and the councils, committees, boards, and other entities. He took particular note of the change in the structure of APA since 1964. In 1964, there were six constitutional committees and three standing committees, as opposed to eight constitutional committees now. Currently, APA has eight councils, 40 task forces, 21 committees, four commissions, and 15 boards and other organizational entities (a total of 88), as compared respectively with three coordinating committees, 30 committees, 15 boards, commissions, and special committees, four ad hoc committees, and seven sections (a total of 59) in 1964.
- The amount of responsibility assigned to each of the eight councils must, of course, vary, but there is a tendency to be extreme in this regard. Currently, for example, one council is responsible for a single task force, another for 18. This matter should be under constant review by the Reference Committee.
- It is worth noting that the Committee on Constitution and By-Laws consists of six members, two appointed each year for a three-year term. One reappointment for an additional three years may be made at the discretion of the President, who also designates the chairman.
- The Assembly of District Branches has several functions: 1) to represent and serve the needs of the branches, 2) to discuss any matter brought to its attention, 3) to recommend policy to the Trustees, and 4) to submit referenda to the voting membership. The Assembly's procedural code describes it as the "legislative component" of APA; however, this is not so stated in the Constitution and By-Laws.
- Dr. Busse ventured the opinion that several principles postulated by Mr. Charles L. Schultz, Director of the Bureau of the Budget under President Johnson, were applicable to APA's various decision-making processes. Among them were

that political and social dimensions are so complex that it is unwise to make radical changes or to implement long-range plans that are difficult to deviate from. Movement toward objectives should proceed by *small* sequential steps that allow for correction and adjustment as we move along. For example, very carefully controlled pilot studies should determine the evolution of medical services, and no pilot study should be permitted to continue for longer than seven years, at which time it must be totally evaluated and the whole program reinitiated.

As Schultz also pointed out, endless hours are wasted on political policy decision making because discussants do not separate relevant from irrelevant ideas, facts are lacking or badly presented, the relationship of the policy under discussion to other projects and policies is not spelled out, conflicts in values are not identified, and possible alternatives are not adequately considered. All must be included in sensible policy decision making. The longer range the policy, the more the alternatives must be considered.

Operations of the Assembly of District Branches as They Pertain to the Trustees

Dr. James Johnson, Speaker of the Assembly, made a number of major points in his presentation.

- The Assembly of District Branches started out in a kind of organizational vacuum from which its present role gradually evolved. One early problem was that the original state associations, which were converted into district branches, originally harbored physician members other than psychiatrists. Accordingly, the district branch as a legal entity had to be separated from the state association as such. This divided organizational arrangement still persists in some states.
- The branches serve as a forum for discussion of common problems at the local level; these problems are often brought to the national level through the area council, where they are debated and resolutions often formulated for consideration by the Assembly. The very structure of the Assembly makes it useful as a means of information exchange among members. The Speaker, Speaker-Elect, and Recorder tend to serve as moderators more than leaders, and they attempt to secure compromise in impasse situations. About 145 APA members are involved in the Assembly (delegates, alternates, area representatives, and area alternates).
- In the early stages of development, communication was tenuous between the Assembly and the Reference Committee and almost nonexistent with the Board of Trustees. The Assembly functioned largely unto itself with relation to the branches. Its own committees and task forces were established on an ad hoc basis and bore little relation to parallel committees and task forces under the Reference Committee.
- About a decade ago it was decided that all new members would enter the Association only through the district branch route. As a result, the Assembly began to take on two new roles: 1) the initiation of policy recommendations, and 2) the restraint of independent policy decision making by the Trustees and the Reference Committee. It passed resolutions for Board approval or disapproval. This process was often tedious. It could, and sometimes did, take as long as three years for a policy decision to be finalized, and the final product often bore no relationship to the original intent. At this point the Speaker of the Assembly was appointed to the Reference Committee to speed up the process, but this was not entirely successful. Often the information at his disposal was not sufficiently developed, or the Assembly, because of time limitations, had not adequately considered matters referred to it by the Reference Committee.
- There is currently the need and desire to improve communication between the Trustees and the Assembly. A method has been found by which the Assembly may communicate matters of concern directly to the Reference Committee, thus circumventing the former routing to the Board and then back to the Reference Committee. The increased responsibilities delegated to the staff in generating possible positions on social issues and legal matters are also helpful. The Assembly and the Reference Committee are now primary instruments in policy development.
- Both the Assembly and the Council on Internal Organization have Committees on Public Information. However, these committees are mostly concerned with organizational affairs and do not generate very much information for the public on what is relevant and important in the field.
- In general, while the mechanisms for studying issues have greatly improved, largely through the Assembly's referral process to area councils, there is still room for improvement.
- The Assembly is moving toward a quasi-legislative role in APA affairs. It has a viable mechanism for implementing action through its area councils and district branches. Currently it is especially heavily involved with such vital matters as recruiting young members and establishing a nationwide system for peer review and a system for continuing education.

APA Staff Operations as They Pertain to the Trustees

Dr. Walter Barton, Medical Director, presented this topic under the following headings:

The Assembly of District Branches. Dr. Henry Work, Chief of Professional Services, provides staff support for the Assembly. He is assisted by Ms. Ann Whinnie. The work involves preparing minutes, implementing the communications process, planning and organizing meetings, formulating agendas, developing backup materials, and following through on implementing Assembly actions and resolutions.

The Trustees and the Executive Committee. In recent years the staff has assumed many administrative tasks that were formerly reserved for decision by the Trustees. These tasks are currently considered routine operations within established policy. The staff maintains elaborate cross-indexed files on policy decisions and has published a digest of policy statements. Working with the Secretary, the Medical Director prepares agendas for meetings and provides backup materials for information, clarification, and presentation of options in the decision-making process. This is a critical function since failure to have such information at hand means postponing the problem for further study and often entails wasted time spent in discussing a matter that cannot be resolved without further information. The staff also assists the Secretary in developing minutes of the meetings and in following up on actions and policies to ensure their implementation.

Reference Committee and councils. The Medical Director and the Deputy Medical Director perform the same functions for the Reference Committee as for the Board of Trustees. Dr. Donald W. Hammersley, Deputy Medical Director, coordinates the activities of the eight councils under the Reference Committee. The staff often identify a problem (frequently suggested by members) and forward it to the appropriate council for consideration. Telephone conferences among councilors and staff are authorized to expedite matters requiring quick action. Dr. Hammersley is assisted in his work by other key staff members to whom the councils are assigned for servicing, i.e., Dr. Work (Council on Medical Education, Council on Research and Development), Dr. Mackey (Council on National Affairs), Dr. Barton (Council on Internal Organization), Mr. Robinson (Council on International Affairs, Council on Emerging Issues), and Dr. Hammersley (Council on Professions and Associations, Council on Mental Health Services). As the councils' work ex-

pands, they require more staff support in processing manuscripts, follow-up actions, and facilitating communications with all parties concerned.

Special problems currently facing the Trustees are: 1) What to do with resolutions received from the Assembly that do not clearly indicate what action is to be taken if and when they are approved and published; 2) liberating time from routine matters to use for policy considerations (the Trustees cannot sit as an "editorial board" in reviewing a large number of manuscripts, for example); and 3) keeping current with the mission and progress of all important matters under study by all components.

Role of staff in policy formation. Inevitably the staff must play a key role in developing APA's response to federal legislative issues. This role is a matter of broadly interpreting established APA policies to apply to a given situation. Usually, this is done through consideration by an intrastaff policy group. It may be that the establishment of a judicial council or possibly more frequent meetings of the Executive Committee of the Board could, in some measure, ameliorate staff responsibility in this important area.

Replacement of the Medical Director. The importance of the immediate appointment of a Search Committee to find a successor to the Medical Director was emphasized.

Expectations of Airlie House: How Far Have We Come?

Dr. Henry Brosin presented this topic for Dr. Robert Garber.

• Generally implicit in the Airlie House deliberations was the conviction that we must evolve an APA that reflects a balance between stability and flexibility. To achieve such a balanced mechanism we above all need a truly effective data collection and disseminating system that touches all components. *Psychiatric News* has made a great contribution, but it is not enough. We need speedy feedback mechanisms between the processes of data input and processing through the central office to the various components concerned. The critical importance of this is sharpened by appreciating the many destructive forces impinging on us (e.g., the loss of federal support for needed manpower, the attacks on the medical profession in general, the supposition that untrained people can treat the mentally ill, and the widespread criticisms of the profession). It is indeed a time for alarm.

• At Airlie House the Trustees (then called councilors) were overwhelmed by the "staggering complex of organizational components" in APA that were operating without coordination toward a common purpose, that had overlapping functions, and that did not have sufficient autonomy or authority to get things done; this resulted in a waste of energy, money, and time. The Trustees made clear their primary concern with policy and their inability to focus on it because of their involvement with administrative routine. They resolved to drastically change the Trustee-committee structure into a council-task-force-oriented structure in order to overcome these basic flaws.

• After several years' experience, however, we cannot state with confidence that the Board of Trustees is functioning up to the level of the Airlie House expectations. There are too few "thinking" or "policy-making sessions" and too many "debating," "dissecting," or "quarterbacking" sessions on the content of reports that the Reference Committee has already carefully sifted. Moreover, reports from task forces, councils, and committees still get buried and lost, chiefly through the back-and-forth referral process among the components involved. In sum, many of the pre-Airlie-House problems still remain with us.

• Recommendations were made: 1) that the chairmen and members of the eight councils be "ruthless" in discharging unproductive task forces and in guaranteeing against duplication of effort among them; 2) that they insist on the rapid conversion of all task forces into truly project-oriented groups to accomplish specified goals in a reasonable period of time; 3) that the councils process reports more quickly; 4) that the confidence originally invested in the Reference Committee's function be reaffirmed; and 5) that renewed determination be manifested to implement the Airlie House proposition that the Trustees discharge their constitutional responsibility and desist from excessive involvement in administrative detail. There has indeed been progress since Airlie House but by no means enough.

EXTERNAL AFFAIRS

What Are the Boundaries of Psychiatry? What Is a Psychiatrist?

This topic was presented by Dr. Hayden Donahue, who made a number of salient points.

• The evolution of psychiatry can be traced back at least 2,000 years, although the term "psychiatrist" did not come into use until the 1830s. Most would now agree that psychiatry is the medical specialty that deals with the study, treatment, and rehabilitation of the mentally ill and that it is both an art and a science.

• There is, perhaps, no consensus about a definition of mental illness, although many definitions have been offered over the years. A recent effort by Dr. Ewald Busse suggests the following definition:

> A mental illness is an altered physiologic and/or anatomic state of the nervous system, manifested by maladaptive signs and symptoms including emotional and thought disturbances and/or alterations in behavior that prevent the individual from functioning in a manner acceptable to himself or to others. The biological change is sufficiently fixed or refractory that it does not spontaneously subside or favorably respond to alterations in the usual life experiences.

This, and comparable efforts at definition, deserve careful consideration. It is not enough simply to define mental illness as any disorder officially described in the second edition of our *Diagnostic and Statistical Manual of Mental Disorders (DSM-II).*

• There is even less consensus about a definition of "mental health," and there is widespread doubt that the term can be properly defined. This has handicapped the profession in many subtle ways. For example, the World Health Organization defines health as a "state of complete physical, mental and social well-being." Clearly, no human being can qualify as a healthy person under such a definition. To accept it literally is to lead psychiatry far afield from the medical model, which, indeed, has already happened to an uncomfortable degree. The problem is compounded by the fact that the etiology of the mental illnesses is so complexly rooted in physiology, psychology, and the environment.

• Other disciplines, especially psychology, social work, and nursing, share several qualities of psychiatry, and the contributions of all the behavioral sciences have long since become recognized as essential to advances in the field. But these disciplines neither share *all* of the qualities of psychiatry, nor is any as uniquely positioned as psychiatry in clinically applying them to mental illness. Beyond his medical assets per se the psychiatrist brings to the treatment of his patients certain knowledge, skills, and attitudes stemming from his professional train-

ing that may be categorized as follows:

Responsibility. This is inculcated into the physician as a student, intern, and resident. It can never be relinquished, and it is not equaled in any other profession. It results from a long tradition; it is a model on which each physician finds a base for identity and behavior.

Psychodynamics. The trained psychiatrist understands the crucial influence of the irrational in human affairs; he listens with a "third ear." He is aware of the importance of separating conscious from unconscious motivational processes. He knows that they must be handled differently. The basic principles of human psychology apply to all interpersonal relationships, albeit many skeptics tend to deny the relevance of psychodynamics as behavioral determinants in persons who are not labeled patients.

Growth and development. The discovery of handicaps or disabilities is only one of the problems approached by the psychiatrist who is concerned with prevention, correction, and adjustment. The helping task may consist of helping many patients to accept incomplete growth rather than in trying to change an existing situation. Because of his theoretical and clinical knowledge concerning standard, "normal" phases of growth and development in the human organism and of the changing interaction of individuals and forces in the environment, he is competent to differentiate between arrested development and regression. The professional, having a cultivated sense of the longitudinal life-span, is alert to the possibilities for awakening and challenging latent growth potentials.

Interpersonal process. The well-trained psychiatrist has a sense of timing and process in interpersonal relationships, that is: 1) an awareness that a relationship proceeds through sequential phases of development, and 2) knowledge of how to guide that development—to shift responses and to influence techniques adaptively—as the quality of the relationship changes with changing circumstances over time.

Professional objectivity. The psychiatrist comprehends the difference between empathy and sympathy. His trained ability to keep his emotional vulnerabilities relatively separate from the disabilities and misfortunes of his patients is usually an asset. The professional helper's ultimate purpose is to lead and to guide the patient to a point of self-sufficiency that makes the helper no longer needed. Ideally, then, the help given has an educational or maturational component and, at carefully determined times, delaying or withholding help is the most constructive move possible.

Interviewing technique. Professional interviewing includes more than friendly conversation, information gathering, or even establishing rapport. It involves both diagnostic and therapeutic dimensions. Inexpert interviewing, particularly in the initial stages of an assistance relationship, can create serious obstacles to subsequent communication.

Countertransference. The mental health professional, through instruction and supervision, has acquired experience with countertransference phenomena and knowledge of how to recognize them and of how to get help, if needed, in using and controlling them. In short, he wears special eyeglasses for looking at both members in an interchange—himself as the professional as well as the patient. He has learned that the source of misunderstanding, misinterpretation, and skewed communication may reside in either or in both.

The clinical psychologist, the social worker, and the nurse all acquire many of these qualities. The properly trained psychiatrist, however, with his background of medical discipline and psychoanalytically oriented psychology, is the most likely to achieve a full range and depth of all of these skills.

- In general, psychiatry as a medical specialty must take stock of its positive assets. We must define our field of competence and leave those areas in which we have neither training nor competence to others who have. We must base our science on solid research. We must clarify our concept of mental illnesses and improve our definition and classification of them. We must evaluate the many criticisms leveled at us and seek to correct those which are valid and which lend themselves to correction. We must limit our pronouncements to our field of competence and, above all, we should eschew pathological self-criticism.

Consumer Influence on Psychiatry

This topic was presented by Dr. Alfred Freedman, who made the following major points:

- It was not so long ago that it was considered a misfortune when a sick person did not receive medical attention. Now it is generally considered an injustice. Health care is currently viewed as a right, and along with this change in opinion a powerful movement has evolved that seeks consumer participation in the delivery of health services. In mental health services, particularly, the consumer constituency is very broad and is having more and more of an impact. For example, in various federal and state health planning boards it is common to require that more than 50 percent of the board be made up of consumers (patients, relatives, friends, potential users, concerned citizens, etc.). It is in such ways that consumers become active participants in decision making.
- Some highly articulate individuals, both within and outside of the profession, are sometimes perceived as "champions" or "the voice" of the consumer (e.g., Ralph Nader, R.D. Laing, and Bruce Ennis). This creates a serious problem for psychiatry, which has no constituency to respond in its behalf. Moreover, while our critics disseminate all kinds of distortions and half-truths about psychiatry, they often do present penetrating facts that cannot be gainsaid. Our response must not be one of denial, defensiveness, or apology but, rather, one of earnest self-criticism and scrutiny and should result in the development of a positive program to cope with the problems of the mentally ill in our society.
- A related and growing public demand is for various kinds of "bills of rights" that impinge on our field. One thinks of Karl Pribram's demand for a "Biological Bill of Rights," of Morris Chafetz' proposal for "A Bill of Rights for Alcoholic People," of a comparable manifesto of the recently formed Mental Patients' Liberation Project, and of another by the Committee on Health Care for the Disadvantaged of the American Hospital Association. Whatever the special merits of these various declarations, they collectively reflect an overriding concern for patients and their welfare; this is a concern with which APA must closely identify itself. It is time to ask ourselves: Have we, the psychiatrists of America, really made a maximal effort to bring adequate psychiatric care to the poor, to adolescents, to the elderly, to addicts, to alcoholics, to the retarded, and to minority groups?
- The real problem in our country is the lack of meaningful, comprehensive services in places that need them. If we are to become concerned with the consumer, organized psychiatry is going to be faced more and more with the dilemma of where to place its support, on which side, and in what way. With regard to many of the issues that are now emerging, we will have to decide whether we will join with consumer groups or consumer advocates and whether we will be neutral or will oppose them, since very often the targets of criticism are members of our own profession or are institutions in which our members are on the staff. Two occurrences during the past year are illustrative.

One of the most important was a New York State Supreme

Court ruling that a mental patient at Bellevue Hospital in New York City had the right to refuse electroshock treatment that had been prescribed by the hospital's physicians. The court decision pointed out that the law did not specify whose consent was required. In this case the patient refused while her mother consented. The judge wrote the following about ECT:

> This form of treatment is the subject of great controversy within the psychiatric profession, both as to its efficacy and as to its dangers. It has been known to aid significantly in the cure of the mentally ill, as well as to cause such other ailments as pulmonary edema, bone fractures and, in exceedingly rare instances, even death.

The ruling stated that the independent psychiatrists authorized by the court to examine the patient concluded that the 31-year-old woman suffered from schizophrenia but "has the mental competence to consent or withhold consent for her treatment."

The other case was brought by civil liberties lawyer Bruce Ennis in a federal court for $38,500 in damages on behalf of a former mental patient who had been confined in a state hospital for 15 years without significant treatment. Punitive and compensatory damages were assessed against two doctors, the superintendent, and a staff psychiatrist of a Florida state hospital. Mr. Ennis clearly stated that his goal is the abolition of involuntary hospitalization, and he encourages patients to sue for lack of treatment or for illegal hospitalization.

- These are the realities of the ambience in which we are and will be practicing. We cannot be passive or indifferent any longer. What can we do? I believe we can join with consumer groups through the excellence, innovativeness, and accessibility of our programs. Only in this way can the public be educated about what we really do. This area and that of public relations, I believe, are of the utmost importance. We have to think in terms of affirmative, positive action so as to develop a constituency. In the days of Clifford Beers we had a constituency. I do not feel we have one at the present time.
- One must emphasize and reemphasize the central importance of providing accessible, available, and comprehensive programs of undoubted excellence. One must strive to be innovative and to modify treatment programs in accordance with careful evaluation. We must all be convinced, as I am, that psychiatrists must play a central role in the delivery of mental health services, or the public will be deprived of first-rate programs. In spite of the swing of the pendulum, the role of psychiatrists will be increasingly recognized as time goes on.
- It is not the consumers who are the biggest threat to organized psychiatry. The threat, rather, is the dehumanized, systems-analysis-oriented bureaucrats who have little sensitivity to the organization and provision of meaningful mental health services. We should join with the consumer movement in full confidence of the competence of the psychiatric profession.

External Controls and Constraints

This topic was presented by Dr. Robert Gibson, who made the following major points:

- A host of management specialists and governmental technocrats assert that the health care crisis results from a lack of organization in the delivery system and charge that doctors are more a part of the problem than the solution.
- Psychiatrists and other physicians approach the health care crisis with quite different premises. We contend that as professionals we place the good of mankind above personal interests, that we have acquired a vast amount of expertise with which to address the crisis, that we conduct ourselves according to standards of competence which we have set, and that we assume responsibility for policing ourselves. Shall ever the twain meet? Both are sincere. The communications gap must be overcome.
- Clearly, if national health care is to be reorganized, it must be managed—that is, planned, coordinated, staffed, implemented, motivated, and controlled. The concept and its complexity boggles the mind, but all of these elements of management are already very much upon us.

First, there are the professional standards-setting organizations—the Joint Commission on Accreditation of Hospitals, residency accreditation, peer review organizations, medical licensing boards, the American Board of Psychiatry and Neurology, APA itself, and other national medical associations. Participation is voluntary, but failure to "go along" is perilous.

Second, there are the health regulating agencies. Among these we find regional and mental health planning agencies; comprehensive community mental health center programs; state, county, and community boards of health; state boards to license facilities; departments that administer mental health programs; and even drug abuse administrations. It is noteworthy that while the Nixon Administration has stated its intention to give the ax to community mental health centers, it is upgrading comprehensive health planning groups. The comprehensive health planning groups are seeking authority to mandate the services they consider are needed and the facilities in which to offer these services. They are also seeking authority to certify health maintenance organizations, outpatient facilities, and even group practice. If they can regulate group practice through health insurance funding mechanisms, then for all practical purposes the individual private practitioner will fall under their control.

Third, there is a small group of miscellaneous regulating agencies and legislation outside the health field that impinge on the management process—e.g., civil rights groups, the judiciary, welfare agencies, the Fair Labor Standards Act, the Occupational Safety and Health Act, and others. Quite possibly the day is near when an adolescent will be able to challenge in court his parents' decision that he have psychiatric care.

Fourth, there is management through financial control—that is, through private insurance, Medicare, Medicaid, wage-price commissions, private foundations, the National Institute of Mental Health, national health insurance, the Internal Revenue Service, cost review agencies, and others. Some national health insurance proposals proclaim their intention to use funding mechanisms to reshape the health care system. Inherent in these financial control mechanisms is the premise that someone must determine what is adequate and needed health care and what it is worth in dollars and cents.

Finally, there is management by consumers. In this category we encompass mental health advisory committees, unions, individual and class-action suits in the courts, and a range of community action groups. These instruments of management can subserve useful coordination, support, and review functions. But a lack of clarity about their functions can lead to a destructive result.

- All too few psychiatrists are aware of the many diverse ways in which our professional activities are being controlled and regulated. Even fewer are involved in shaping the growth of the management process, and the time grows late.
- There is much, I submit, that we can do, chiefly through APA. For one thing, a proposal has been made to amend APA's Constitution to render continuing education a requirement for membership. The amendment will be voted on next year. APA would set the standards for such education. This is good.

APA district branches can and should ensure that state medical societies identify them as the specialty section in the peer-review systems that the state medical societies are supposed to implement.

APA can participate in the development of controls. Already it is a partner in the Accreditation Council of the Joint Council for the Accreditation of Hospitals, and it must intensify its involvement and strengthen its impact in other control agencies.

APA can and should play a far more telling advisory role based on its expertise. In Maryland, for example, the regional planning agency has designated the APA district branch as a technical review committee; every proposal containing a psychiatric input is submitted to that committee for review and recommendation. This is as it should be.

APA can greatly step up its advocacy role to exert a much greater force on legislation and on the formulation of regulations to implement it, which is often more significant than the legislation itself.

APA can and should expand its public education programs. It has done much, but the fact remains that in a single column Ann Landers can have more impact on the future of health care than years of work by APA.

- In general, we plead that, collectively, the profession must stop reacting reflexively by simply protesting and demanding its prerogatives. It won't work any longer. We must study what is actually happening and must vastly improve our input and feedback mechanisms—as among APA's governing and staff components, for example. We must find a way of communicating with those who view us as more "a part of the problem than the solution." We cannot reverse the trend toward greater management and control, but we can do much to shape its form. To do this, however, we need an overall strategy for responding and for taking the initiative at every possible level. Most of all we must find a way to mobilize 20,000 members behind this mighty effort.

The Need for a New Joint Commission on Mental Illness and Health (JCMIH)

This presentation was made by APA President, Dr. Perry Talkington, who made the following major points:

- Nearly 12 years have elapsed since the publication of *Action for Mental Health*, the final report of the first JCMIH, which was established by the 1955 Mental Health Study Act. Following in its wake, President Kennedy delivered his stirring Special Message on Mental Illness and Retardation in 1963 and this, in turn, led to the Community Mental Health Centers Act of 1963.
- It is time now for a second JCMIH. Psychiatry and psychiatrists have changed drastically in the past decade. The patients have changed, and the delivery and financing of mental health services have changed. We need to find out in a comprehensive way where we have been, where we are now, and where we should go from here. The specific functions and goals of such a joint commission call for careful study and planning. But among its primary concerns should be problems in the delivery and financing of mental health services for all citizens and the manpower problem.
- If we are agreed in principle with the need for a new JCMIH, then, clearly, its elaboration and materialization must be given careful study and projection by some designated group. How shall it be financed? (It will be considerably more expensive than the first commission, which was financed almost entirely by Congress.) What range of organizations shall be encompassed under the term "joint"? Should it be projected exclusively as an APA commission to ensure that the psychiatric point of view is not lost in a forest of many other points of view, many of them denigratory of psychiatry? These and related problems are crucial.

FINAL SESSIONS OF THE MEETING

After the formal presentations (each of which was followed by considerable discussion), the Trustees divided into four working groups, each being asked to consider one of four topics and to report back to the final plenary session with recommendations for specific action. The actions taken by the Trustees under each heading follow.

Topic: Boundaries of Psychiatry

The Trustees referred to the Reference Committee a suggestion that a task force be appointed to define the terms "mental illness" and "psychiatrist."

Also referred to the Reference Committee was a recommendation that the Council on Research and Development assume responsibility for the revision of *DSM-II* and that the task be completed within two years. The trustees recognized that *DSM-II* occupies a unique position in that it is widely used in other countries, as well as in our own. However, in spite of this it was felt that the needs of the profession in the United States should take priority over international considerations. It was also agreed that *DSM-III* should relate the official classification to the problem-oriented-record-system approach. It was also noted that the existing Task Force on Nomenclature and Statistics is currently at work in developing a revised *International Classification of Diseases* (*ICD-9*), of which psychiatry is an important part. If a new task force is to be appointed, it will be important for it to develop close working ties with the current one.

The Trustees recommended that whatever classification is ultimately adopted should contain provision for designating the *degree* of functional disability that accompanies a diagnostic category. The intent is to express functional disability in percentages. It was also held that the term "mental illness" should be defined and used in the context that the absence of mental illness does not necessarily imply the presence of mental health.

Topic: Consumer Influence on Psychiatry

The Trustees requested the current Task Force on Collaboration of the Psychiatrist and the Consumer to study the feasibility of establishing a consumer advisory council and an office of consumer advocacy in APA headquarters. The staff was asked to make a similar study with reference to the mode of functioning and cost of such an office. Both groups were asked to report back in May 1973.

The Trustees referred to the Assembly of District Branches a recommendation that it encourage the branches to function as consumer advocates in their areas and to develop working relationships with various consumer advocate groups.

The staff (Division of Public Affairs), with the help of an advisory committee, was asked to prepare a pamphlet on the general topic of the mentally ill and the mentally retarded consumer. In making the recommendation the Trustees expressed their conviction that patients' rights represented the very essence of their commitment to patients. It is hoped that such a statement from APA might have impact in the states on legislation to safeguard patients' rights.

Topic: External Controls

The APA Budget Committee was asked to find ways and

means of financing and expanding the government relations operation at APA headquarters, including the probable need for a dues increase. That the profession needs more action in the legislative field is manifest, and with it the need for more effective public education programs was recognized.

The editor of *Psychiatric News* was requested to condense the essentials of Dr. Gibson's presentation and to publish it. This has been done.

There was strong reaffirmation of the need for APA to assume more direct and vigorous responsibility for fostering continuing education. Ways must be found to stimulate the individual psychiatrist to accept and pursue his own continuing development.

Topic: New Joint Commission on Mental Illness and Health

The Trustees approved in principle the establishment of a second JCMIH with the intent that it be a joint venture with other organizations and that it focus primarily on the delivery and financing of mental health services and the manpower problem. Deficiencies in the work of the first joint commission were noted, e.g., failure to encompass children, the mentally retarded, and the aging. It was agreed that APA should assume an initiatory and sustained leadership role in delineating the needs of the nation's mentally ill and how these needs can be met.

The Trustees approved appointment of an ad hoc committee to the Council on Mental Health Services. The committee would undertake preliminary planning for a new joint commission with the understanding that the committee would: 1) consider the many points raised by the Trustees in discussing the proposition; 2) assure the Assembly and district branches of input in the planning process; 3) give special attention to the numbers and kinds of organizations, agencies, and consumer representatives that could contribute meaningfully to the planning process; and 4) in general, review the work of the past joint commissions, assess their impact and where we stand now, and project where we want to go and how a new joint commission could help move the profession in that direction. The ad hoc committee was requested to report back in May 1973 with the thought that, at that time, there might have been established a more comprehensive and orderly planning process involving other organizations.

Miscellaneous Actions

Each year the Reference Committee has been requested to study two APA councils and their components in depth and in doing so: 1) to continue to weed out unproductive components; 2) to ensure that priorities on issues be continuously reviewed so that APA's resources may be used most productively and efficiently; and 3) to develop a mechanism by May 1973 to enable each task force and committee to state its objectives, the time needed to complete its task, and the procedures for doing so.

It was agreed that the Executive Committee of the Assembly would designate one member to meet with each of the eight councils to improve effective liaison.

The Trustees accepted the Medical Director's recommendation for procedures to select his successor. The President was requested to appoint a search committee immediately (which has been done), to proceed first with defining the functions of the Medical Director and the qualifications needed to carry them out (to be done by May 1973), and then to recommend candidates who manifest these qualifications (to be done by December 1973).

The Trustees scheduled an additional meeting of their Executive Committee prior to their full meeting at the annual meeting in May. This will free considerable time for the Board to consider policy matters then. The Trustees urged the Executive Committee to meet more often to dispose of routine matters, all to the general end of freeing more time for the Board to consider policy matters.

The Trustees asked the Reference Committee to review the current methods of clearing task force reports for publication. The possibility has been posed of establishing a joint committee with the Assembly for publication review, but the Reference Committee is inclined to believe that the content of task force reports can best be judged by the appropriate council.

The Committee on Constitution and By-Laws was asked to study the relative merits of representing special interest and subspecialty groups on the Board of Trustees (e.g., minorities, women, child psychiatrists, etc.) as opposed to geographic representation. Later, on Feb. 23, 1973, the Executive Committee of the Trustees modified the suggestion by recommending the establishment of an ad hoc committee to study this matter; the committee would be composed of representatives from the Assembly, the Board of Trustees, and the Committee on Constitution and By-Laws.

Position Statement on the Confidentiality of Medical Research Records

This statement was approved by the Board of Trustees of the American Psychiatric Association at its December 8–9, 1972, meeting, upon recommendation of the Council on Research and Development. It was prepared by the Task Force on Confidentiality of Medical Research Records.[1] *The Executive Committee of the Assembly of District Branches endorsed the statement at its meeting on February 17, 1973.*

THE PURPOSE OF THIS STATEMENT is to protect patients and subjects by developing principles that assure the confidentiality of records which might identify the individual patient or subject. Its purpose is also to protect the ethical investigator and those involved with his research against litigious and other punitive actions.

Every investigator and sponsoring agency has an ethical responsibility to preserve the confidentiality of information that might identify the patients or subjects.

A physician, hospital, institution, or agency may release research data only to a professionally qualified and responsible investigator, and only if such data are essential. Identifying data should never be released without the knowing consent of the patient, his guardian, or his survivor.

The investigator should explain to the patient or subject the extent of the confidentiality of the information furnished. If identifying data may be of potential interest to civil, criminal, or administrative authorities, the investigator should, wherever possible, obtain a written waiver in advance from the officials concerned. If there is a court order to divulge such information, it should be released only after a thorough and proper judicial review of the facts.

Before authorizing transfer of *any* data to other research personnel the investigator must *receive assurance in writing* that the aforementioned principles will be followed.

Modern data processing systems create problems in the application of these principles. The primary responsibility for ensuring the confidentiality of records rests with the investigator regardless of the method by which such records are stored.

Federal and state legislation should be enacted that implements these stated principles. The task force felt that the statutes enacted by various states offered many good suggestions, particularly the Maryland Annotated Code, Article 43 Section 149-C (1957-Repl. Vol. 1969); Article 35 Section 102, and Article 75-C Section 11; and the Connecticut Public Acts (1969), Public Act Number 819 Sections 5 and 6. These represent good examples of sound, useful, and workable legislation that may serve as general models. The task force suggests, however, stronger sanctions for instances when these laws are abused.

[1]The task force included: Jonas R. Rappeport, M.D., chairman; Sidney Merlis, M.D.; Henry A. Davidson, M.D.; Gerald D. Klee, M.D.; A. Louis McGarry, M.D.; and William Curran, LL.D., and Everett Goldberg, LL.B., consultants.

Position Statement on College Mental Health

This statement was approved by the Board of Trustees of the American Psychiatric Association at its December 8–9, 1972, meeting, upon recommendation of the Council on Medical Education and Career Development. It was prepared by the Task Force on College Mental Health.[1] *The Executive Committee of the Assembly of District Branches endorsed the statement at its meeting on February 17, 1973.*

THE TASK FORCE RECOGNIZES that, for many years, psychiatrists have played a significant role in institutions of higher learning in this country. Higher education is facing major challenges and changes. It is crucial that institutions and psychiatrists who work in them be aware of the impact these changes have on the growth and development of the individual.

In the clinical situation the psychiatrist typically focuses on the individual's response to both internal and environmental factors and attempts to help the individual deal with these factors. The psychiatrist working in the college setting has a particular obligation to recognize those institutional conditions which affect individual functioning, both adversely and positively. With this understanding he has the opportunity to contribute significantly to the process of constructive change. Both of these opportunities—to assist the individual and the institution—are essential components of the psychiatrist's role on campus.

There are conditions essential to the effective implementation of each of these tasks or opportunities. Psychotherapy on campus has obvious similarities to other psychiatric clinical situations, but there are also some important differences. These include: accessibility without the necessary definition of "patient role"; rapidity and appropriateness of the professional response to the felt need of the individual who is requesting help; particular attention to policies of confidentiality; recognition that problems of the student age group may be more responsive to minimal intervention; and the special importance of understanding the social context in which the patient moves.

In assisting the institution toward constructive change the psychiatrist must be aware of the sensitivity of his position. It is essential that his activities be conducted in such a way that individual confidences are absolutely protected. Other factors relevant to this second task of consultation include: a high degree of personal visibility on campus; accepting the limits of one's competency, especially in unfamiliar, nonpsychiatric areas; defining and clarifying problems on campus; and facilitating communication on campus. The psychiatrist can influence matters of policy in the college community. However, he is not the only professional involved in these matters, and mental health factors are not the only ones contributing to policy decisions.

The task force recognizes that only a few psychiatrists will work full-time in college health settings. Others may work part-time on campus or see individual patients in their offices off campus. It is important that all such groups of psychiatrists become aware of the stated issues.

[1]The task force included: James R. Raybin, M.D., chairman; Robert L. Arnstein, M.D.; Seymour L. Halleck, M.D.; Clifford B. Reifler, M.D.; Bensor R. Snyder, M.D.; and James Banning, M.D., consultant.

Joint Statement on Antisubstitution Laws and Regulations

The American Medical Association asked APA to join other organizations in approving this joint statement. The statement was approved by the Board of Trustees of the American Psychiatric Association at its meeting on February 23, 1973. As of the end of March 1973, 11 organizations,[1] including APA and AMA, had approved this statement.

THE PURPOSE OF THIS STATEMENT is to affirm the support of the participating organizations for the laws, regulations, and professional traditions that prohibit the unauthorized substitution of drug products.

Traditionally, physicians, dentists, and pharmacists have worked cooperatively to serve the best interests of patients. Productive cooperation has been achieved through mutual respect, as well as through a common concern for the ideals of public service. This mutual respect has been reflected, in part, by joint support over the years for the adoption and enforcement of laws and regulations specifically prohibiting unauthorized substitution and encouraging joint discussion and selection of the supply source of drug products. The basic principles of medical, dental, and pharmaceutical practice are thus utilized and preserved in the interests of patient welfare.

The antisubstitution laws have not obstructed enhancement of the professional status of pharmacy any more than they have, in and of themselves, guaranteed absolute protection from unsafe drugs or have freed physicians, dentists, and pharmacists from their responsibilities to patients. As a practical matter, however, such laws and regulations encourage interprofessional communications regarding drug product selection and assure each profession of the opportunity to exercise fully its expertise in drug usage to the patients' advantage.

Physicians and dentists should be urged to increase the frequency and regularity of their contacts with pharmacists in selecting quality drug products, recognizing that economies to patients can be improved through such communication and taking into account the patients' needs. The pharmacists' knowledge of the chemical characteristics of drugs, their mode of action, toxic properties, and other characteristics that assist in making drug selection decisions should be utilized to the fullest extent practicable by physicians and dentists in serving their patients.

Since drug product selection entails knowledge derived from clinical experience, the physician's role in product selection remains primary and does not permit delegation of decisions requiring medical judgment. A broader role in therapy will evolve for pharmacists as improved understanding and cooperation between the two professions continue to grow.

There has been no evidence that convincing reasons exist to modify or to repeal existing laws and regulations prohibiting the unauthorized substitution of one drug product for the drug product specified by a prescriber. It is our belief that such laws and regulations merit the joint support of the medical, dental, and pharmaceutical professions and of the pharmaceutical industry.

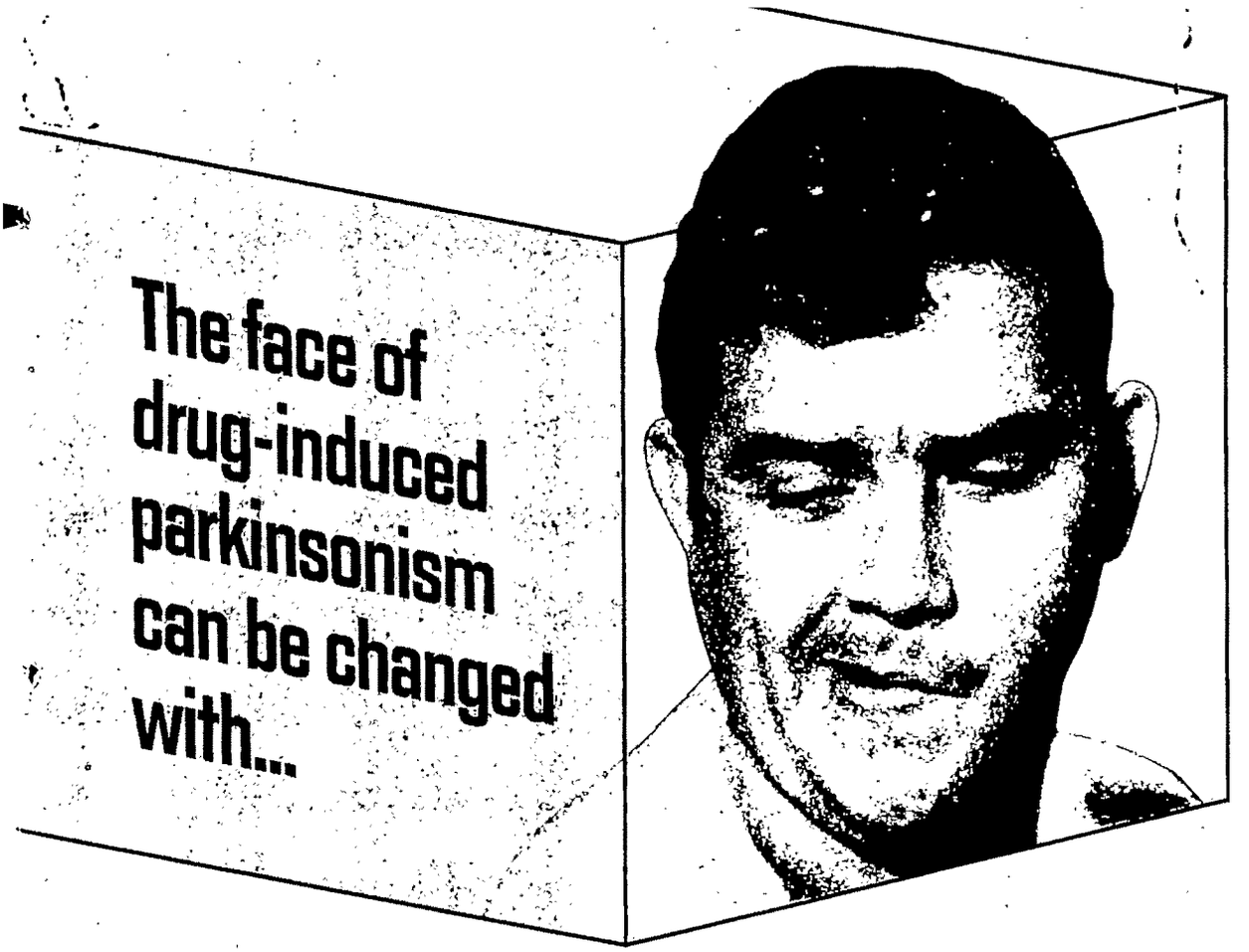
[1] The organizations are: the American College of Obstetricians and Gynecologists, the American College of Physicians, the American Academy of Neurology, the American College of Allergists, the American Dental Association, the American College of Cardiology, the American Academy of Dermatology, the American Academy of Family Physicians, the American Academy of Pediatrics, the American Medical Association, and the American Psychiatric Association.

Prompt Publication Policy

The *Journal* would like to remind those authors who are particularly interested in early publication (whether to establish priority of an idea, reveal innovative results of new research, or for other pressing reasons) of its prompt publication policy, first announced in the April 1971 issue (p. 1399) as follows:

"The *Journal* would consider publishing very short (two-to-four-page) manuscripts in the first available issue. Of course, these manuscripts will still have to undergo expert scrutiny before being accepted, and two months must be allowed for the printing process, but we think we can considerably shorten the time required for the publication of these very short articles, which will be included in the Brief Communications section."

Authors who would like to have their manuscripts considered under this policy should indicate this desire, as well as the reasons for it, when they submit their manuscripts.



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Warning: *Use in Pregnancy:* Safety for use in pregnancy not established.

Precautions: Hypotensive reactions are rare, but use with caution where complications could ensue from a fall in blood pressure, especially in the elderly. Withdrawal symptoms upon discontinuation have been noted in some patients exhibiting drug dependence through chronic overdose. Carefully supervise dose and amounts prescribed, especially for patients prone to self-overdose; excessive, prolonged use in susceptible patients (alcoholics, ex-addicts, etc.) may result in dependence or habituation. Reduce dosage gradually after prolonged excessive dosage to avoid possible epileptiform seizures. Withdrawal symptoms following abrupt discontinuance are similar to those seen with barbiturates. Caution patients against driving or operating machinery until absence of drowsiness or dizziness is ascertained. Warn patients of possible reduction in alcohol tolerance.

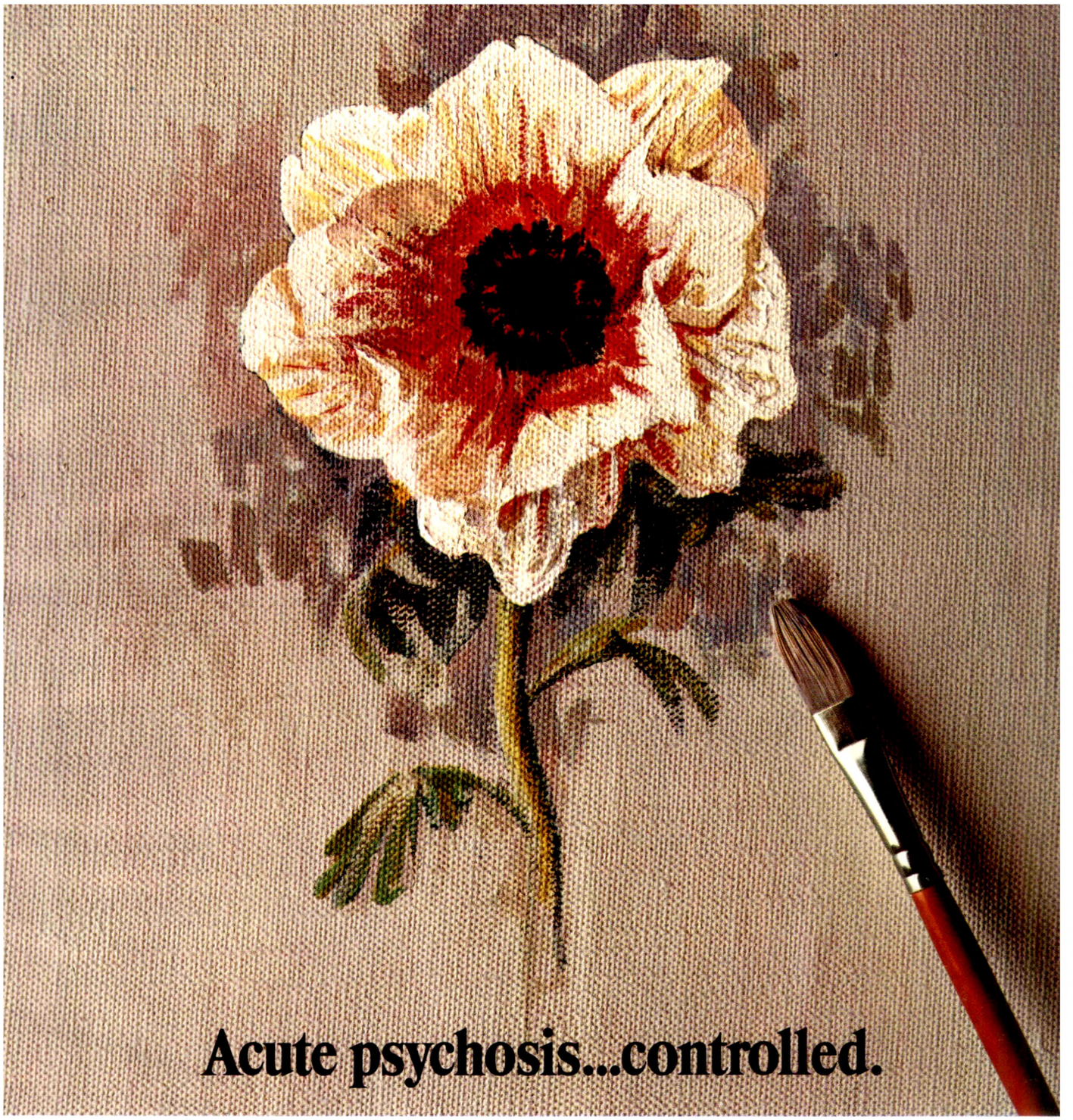
Not indicated in children under 6 years; absolute dosage for 6- to 12-year-olds not established.

Adverse Reactions: Therapy-interrupting side effects are rare. Transient mild drowsiness is common initially; if persistent, reduce dosage. Dizziness, vertigo and headache have also occurred infrequently; syncope, rarely. Mild paradoxical reactions (excitement, stimulation of affect) are reported in psychiatric patients. Minor diffuse rashes (morbilliform, urticarial and maculopapular) are rare. Nausea, lethargy, edema, slurred speech, tremor and altered libido are rare and generally controllable by dosage reduction. Although rare, leukopenia and hepatic dysfunction including jaundice have been reported during therapy. Periodic blood counts and liver function tests are advised. Ataxia, reported rarely, does not appear related to dose or age. These side reactions, noted with related compounds, are not yet reported: paradoxical excitation with severe rage reactions, hallucinations, menstrual irregularities, change in EEG pattern, blood dyscrasias (including agranulocytosis), blurred vision, diplopia, incontinence, stupor, disorientation, fever and euphoria.

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Actions. Navane is a psychotropic agent of the thioxanthene series. Navane possesses certain chemical and pharmacological similarities to the piperazine phenothiazines and differences from the aliphatic group of phenothiazines. Navane's mode of action has not been clearly established.

Indications. Navane is effective in the management of manifestations of psychotic disorders.

Contraindications. Navane is contraindicated in patients with circulatory collapse, comatose states, central nervous system depression due to any cause, and blood dyscrasias. Navane is contraindicated in individuals who have shown hypersensitivity to the drug. It is not known whether there is a cross-sensitivity between the thioxanthenes and the phenothiazine derivatives, but this possibility should be considered.

Warnings. *Usage in Pregnancy* – Safe use of Navane during pregnancy has not been established. Therefore, this drug should be given to pregnant patients only when, in the judgment of the physician, the expected benefits from the treatment exceed the possible risks to mother and fetus. Animal reproduction studies and clinical experience to date have not demonstrated any teratogenic effects.

In the animal reproduction studies with Navane (thiothixene), there was some decrease in conception rate and litter size, and an increase in resorption rate in rats and rabbits, changes which have been similarly reported with other psychotropic agents. After repeated oral administration to rats (5 to 15 mg./kg./day), rabbits (3 to 50 mg./kg./day), and monkeys (1 to 3 mg./kg./day) before and during gestation, no teratogenic effects were seen. (See Precautions.)

Usage in children—The use of Navane in children under 12 years of age is not recommended because safety and efficacy in the pediatric age group have not been established.

As is true with many CNS drugs, Navane may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks such as driving a car or operating machinery, especially during the first few days of therapy. Therefore, the patient should be cautioned accordingly.

As in the case of other CNS-acting drugs, patients receiving Navane should be cautioned about the possible additive effects (which may include hypotension) with CNS depressants and with alcohol.

Precautions. An antiemetic effect was observed in animal studies with Navane; since this effect may also occur in man, it is possible that Navane (thiothixene) may mask signs of overdosage of toxic drugs and may obscure conditions such as intestinal obstruction and brain tumor.

In consideration of the known capability of Navane and certain other psychotropic drugs to precipitate convulsions, extreme caution should be used in patients with a history of convulsive disorders or those in a state of alcohol withdrawal since it may lower the convulsive threshold. Although Navane potentiates the actions of the barbiturates, the dosage of the anticonvulsant therapy should not be reduced when Navane is administered concurrently.

Caution as well as careful adjustment of the dosage is indicated when Navane is used in conjunction with other CNS depressants other than anticonvulsant drugs.

Though exhibiting rather weak anticholinergic properties, Navane should be used with caution in patients who are known or suspected to have glaucoma, or who might be exposed to extreme heat, or who are receiving atropine or related drugs.

Use with caution in patients with cardiovascular disease.

Also, careful observation should be made for pigmentary retinopathy and lenticular pigmentation (fine lenticular pigmentation has been noted in a small number of patients treated with Navane [thiothixene] for prolonged periods). Blood dyscrasias (agranulocytosis, pancytopenia, thrombocytopenic purpura), and liver damage (jaundice, biliary stasis), have been reported with related drugs.

Undue exposure to sunlight should be avoided. Photosensitive reactions have been reported in patients on Navane.

Intramuscular Administration – As with all intramuscular preparations, Navane (thiothixene hydrochloride) Intramuscular should be injected well within the body of a relatively large muscle. The preferred sites are the upper outer quadrant of the buttock (i.e., gluteus maximus) and the midlateral thigh.

The deltoid area should be used only if well developed such as in certain adults and older children, and then only with caution to avoid radial nerve injury. Intramuscular injections should not be made into the lower- and mid-thirds of the upper arm. As with all intramuscular injections, aspiration is necessary to help avoid inadvertent injection into a blood vessel.

Adverse Reactions. *Note:* Not all of the following reactions have been reported with Navane. However, since Navane has certain chemical and pharmacologic similarities to the phenothiazines, all of the known side effects and toxicity associated with phenothiazine therapy should be borne in mind when Navane (thiothixene) is used.

Cardiovascular effects: Tachycardia, hypotension, lightheadedness and syncope. In the event hypotension occurs, epinephrine should not be used as a pressor agent since a paradoxical further lowering of blood pressure may result. Nonspecific EKG changes have been observed in some patients receiving Navane. These changes are usually reversible and frequently disappear on continued Navane therapy. The clinical significance of these changes is not known.

CNS effects: Drowsiness, usually mild, may occur, although it usually subsides with continuation of Navane therapy. The incidence of sedation appears to be similar to that of the piperazine group of phenothiazines, but less than that of certain aliphatic phenothiazines. Restlessness, agitation and insomnia have been noted with Navane. Seizures and paradoxical exacerbation of psychotic symptoms have occurred with Navane infrequently.

Hyperreflexia has been reported in infants delivered from mothers having received structurally related drugs.

In addition, phenothiazine derivatives have been associated with cerebral edema and cerebrospinal fluid abnormalities.

Extrapyramidal symptoms, such as pseudoparkinsonism, akathisia, and dystonia have been reported. Management of these extrapyramidal symptoms depends upon the type and severity. Rapid relief of acute symptoms may require the use of an injectable antiparkinson agent. More slowly emerging symptoms may be managed by reducing the dosage of Navane and/or administering an oral antiparkinson agent.

Persistent Tardive Dyskinesia: Although not reported with Navane, certain antipsychotic agents have been associated with persistent dyskinesias. Tardive dyskinesia may appear in some patients on long term therapy or may occur after drug therapy has been discontinued. The risk seems to be greater in elderly patients on high dose therapy, especially females. The symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movements of the tongue, face, mouth or jaw (e.g., protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Sometimes these may be accompanied by involuntary movements of extremities.

There is no known effective treatment for tardive dyskinesia; antiparkinsonism agents usually do not alleviate the symptoms of this syndrome. It is suggested that all antipsychotic agents be discontinued if these symptoms appear.

Should it be necessary to reinstitute treatment, or increase the dosage of the agent, or switch to a different antipsychotic agent, the syndrome may be masked.

It has been reported that fine vermicular movements of the tongue may be an early sign of the syndrome and if the medication is stopped at that time, the syndrome may not develop.

Hepatic effects: Elevations of serum transaminase and alkaline phosphatase, usually transient, have been infrequently observed in some patients. No clinically confirmed cases of jaundice attributable to Navane (thiothixene) have been reported.

Hematologic effects: As is true with certain other psychotropic drugs, leukopenia and leucocytosis, which are usually transient, can occur occasionally with Navane. Other antipsychotic drugs have been associated with agranulocytosis, eosinophilia, hemolytic anemia, thrombocytopenia and pancytopenia.

Allergic reactions: Rash, pruritus, urticaria, photosensitivity and rare cases of anaphylaxis have been reported with Navane. Although not experienced with Navane, exfoliative dermatitis and contact dermatitis (in nursing personnel) have been reported with certain phenothiazines.

Endocrine disorders: Lactation, moderate breast enlargement and amenorrhea have occurred in a small percentage of females receiving Navane. If persistent, this may necessitate a reduction in dosage or the discontinuation of therapy. Phenothiazines have been associated with false positive pregnancy tests, gynecomastia, hypoglycemia, hyperglycemia, and glycosuria.

Autonomic effects: Dry mouth, blurred vision, nasal congestion, constipation, increased sweating, increased salivation, and impotence have occurred infrequently with Navane therapy. Phenothiazines have been associated with miosis, mydriasis, and adynamic ileus.

Other adverse reactions: Hyperpyrexia, anorexia, nausea, vomiting, diarrhea, increase in appetite and weight, weakness or fatigue, polydipsia and peripheral edema.

NOTE: Sudden deaths have occasionally been reported in patients who have received certain phenothiazine derivatives. In some cases the cause of death was apparently cardiac arrest or asphyxia due to failure of the cough reflex. In others, the cause could not be determined nor could it be established that death was due to phenothiazine administration because safe conditions for its use have not been established.

Dosage and Administration. Dosage of Navane should be individually adjusted depending on the chronicity and severity of the condition. In general, small doses should be used initially and gradually increased to the optimal effective level, based on patient response.

Usage in children under 12 years of age is not recommended.

Navane Intramuscular Solution—For Intramuscular Use Only. Where more rapid control and treatment of behavior is desirable, the intramuscular form of Navane (thiothixene hydrochloride) may be indicated. It is also of benefit where the very nature of the patient's symptomatology, whether acute or chronic, renders oral administration impractical or even impossible.

For treatment of acute symptomatology or in patients unable or unwilling to take oral medication, the usual dose is 4 mg. of Navane Intramuscular administered 2 to 4 times daily. Dosage may be increased or decreased depending on response. Most patients are controlled on a total daily dosage of 16 to 20 mg. The maximum recommended dosage is 30 mg./day. An oral form should supplant the injectable form as soon as possible. It may be necessary to adjust the dosage when changing from the intramuscular to oral dosage forms. Dosage recommendations for Navane Capsules and Concentrate appear in the following paragraphs.

Navane Capsules: Navane Concentrate—In milder conditions, an initial dose of 2 mg. three times daily. If indicated, a subsequent increase to 15 mg./day total daily dose is often effective.

In more severe conditions, an initial dose of 5 mg. twice daily.

The usual optimal dose is 20 to 30 mg. daily. If indicated, an increase to 60 mg./day total daily dose is often effective. Exceeding a total daily dose of 60 mg. rarely increases the beneficial response.

Some patients have been successfully maintained on once-a-day Navane (thiothixene) therapy.

Overdosage. Manifestations include muscular twitching, drowsiness, and dizziness. Symptoms of gross overdosage may include CNS depression, rigidity, weakness, torticollis, tremor, salivation, dysphagia, hypotension, disturbances of gait, or coma.

Treatment: Essentially symptomatic and supportive. For Navane oral, early gastric lavage is helpful. For Navane oral and intramuscular, keep patient under careful observation and maintain an open airway, since involvement of the extrapyramidal system may produce dysphagia and respiratory difficulty in severe overdosage. If hypotension occurs, the standard measures for managing circulatory shock should be used (I.V. fluids and/or vasoconstrictors).

If a vasoconstrictor is needed, levarterenol and phenylephrine are the most suitable drugs. Other pressor agents, including epinephrine, are not recommended, since phenothiazine derivatives may reverse the usual pressor action of these agents and cause further lowering of blood pressure.

If CNS depression is present, recommended stimulants include amphetamine, dextroamphetamine, or caffeine and sodium benzoate. Picrotoxin or pentylenetetrazol should be avoided. Extrapyramidal symptoms may be treated with antiparkinson drugs.

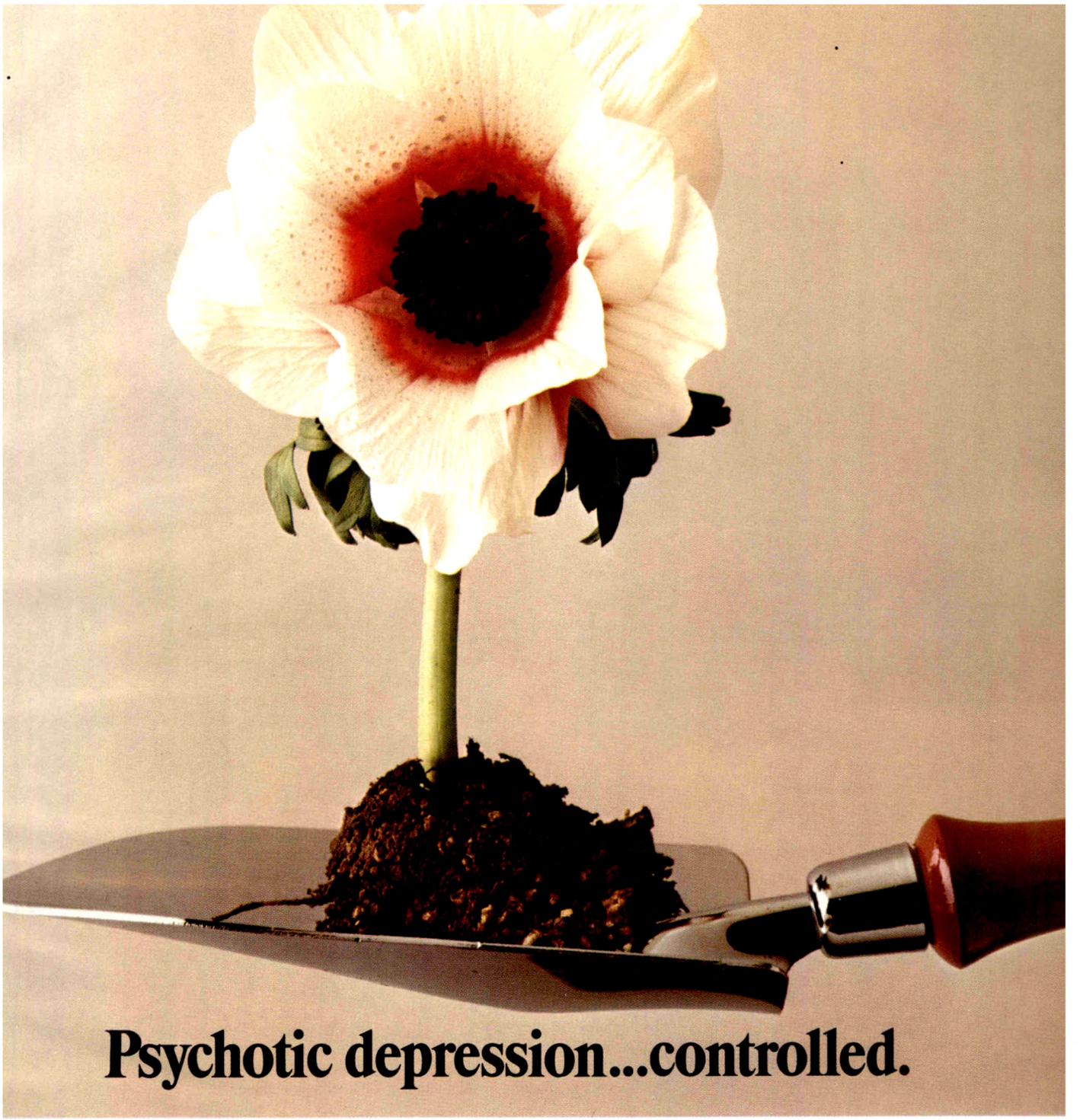
There are no data on the use of peritoneal or hemodialysis, but they are known to be of little value in phenothiazine intoxication.

How Supplied. Navane (thiothixene) is available as capsules containing 1 mg., 2 mg., 5 mg., and 10 mg. in bottles of 100 and 1,000.

Navane (thiothixene hydrochloride) Concentrate is available in 120 cc. (4 oz.) bottles with an accompanying dropper calibrated at 2 mg., 4 mg., 5 mg., 6 mg., 8 mg. and 10 mg. Each cc. contains thiothixene hydrochloride equivalent to 5 mg. of thiothixene. Contains alcohol, U.S.P. 7.0% v/v. (small loss unavoidable).

Navane (thiothixene hydrochloride) Intramuscular Solution is available in a 2 cc. amber glass vial in packages of 10. Each cc. contains thiothixene hydrochloride equivalent to 2 mg. of thiothixene, dextrose 5% w/v, benzyl alcohol 0.9% w/v.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017



Psychotic depression...controlled.

Navane (thiothixene) helps reduce the intensity and frequency of depression as manifested in psychotic disorders. Mental and motor retardation may be replaced by an increasing interest in self and environment and a return to productive activity. Severe mood disorders may be relieved to encourage cooperation with therapy and daily routine. Navane...an effective anti-psychotic.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

Navane®

(thiothixene) (thiothixene hydrochloride)

Capsules 1 mg., 2 mg., 5 mg., 10 mg. Concentrate 5 mg./cc., Intramuscular 2 mg./cc.

to help control psychotic depression

For prescribing information, including adverse reactions and contraindications, please see facing page of this advertisement.



HELPS KEEP THE REAL IN REALITY

Effective Management of Psychotic Symptoms

- Calms hyperactive behavior
- Controls hostility
- Decreases delusions, auditory and visual hallucinations
- Allays underlying fear, anxiety and tension
- Lessens unusual thought content, paranoid ideation
- Reduces emotional withdrawal

Before prescribing, see complete prescribing information including dosage and symptoms and treatment of overdosage, in SK&F literature or *PDR*.

Indications
Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: For the management of manifestations of psychotic disorders.

Probably effective: For control of the manifestations of manic-depressive illness (manic phase). For the control of moderate to severe agitation, hyperactivity or aggressiveness in disturbed children.

Possibly effective: For control of excessive anxiety, tension and agitation as seen in neuroses.

Final classification of the less-than-effective indications requires further investigation.

Contraindications: Comatose states, presence of large amounts of C.N.S. depressants, or bone marrow depression.

Warnings: Avoid using in patients hypersensitive (e.g., blood dyscrasia, jaundice) to any phenothiazine. Caution patients about activities requiring alertness (e.g., operating vehicles or machinery), especially during the first few days' therapy. Avoid concomitant use with alcohol. May counteract antihypertensive effect of guanethidine and related compounds.

Use in pregnancy only when essential. There are reported instances of jaundice or prolonged extrapyramidal signs in newborn whose mothers had received chlorpromazine.

Precautions: Use cautiously in persons with cardiovascular, liver or chronic respiratory disease, or with acute respiratory infections. Due to cough reflex suppression, aspiration of vomitus is possible. May prolong or intensify the action of C.N.S. depressants, organophosphorus insecticides, heat, atropine and related drugs. (Reduce dosage of concomitant C.N.S. depressants.) Anticonvulsant action of barbiturates is not intensified. Antiemetic effect may mask signs of toxic drug overdosage or physical disorders. Discontinue high-dose, long-term therapy gradually.

Patients on long-term therapy, especially high doses, should be evaluated periodically for possible adjustment or discontinuance of drug therapy.

Adverse Reactions: Drowsiness, cholestatic jaundice, agranulocytosis, eosinophilia, leukopenia, hemolytic anemia, thrombocytopenic purpura and pancytopenia; postural hypotension, tachycardia, fainting, dizziness and, occasionally, a shock-like condition; reversal of epinephrine effects; EKG changes have been reported, but relationship to myocardial damage is not confirmed; neuromuscular (extrapyramidal) reactions; pseudoparkinsonism, motor restlessness, dystonias, persistent tardive dyskinesia, hyperreflexia in the newborn; psychotic symptoms, catatonic-like states, cerebral edema; convulsive seizures; abnormality of the cerebrospinal fluid proteins; urticarial reactions and photosensitivity, exfoliative dermatitis, contact dermatitis; lactation and breast engorgement (in females on large doses), false positive pregnancy tests, amenorrhea, gynecomastia; hyperglycemia, hypoglycemia, glycosuria; dry mouth, nasal congestion, constipation, adynamic ileus, urinary retention, miosis, mydriasis; after prolonged substantial doses, skin pigmentation, epithelial keratopathy, lenticular and corneal deposits and pigmentary retinopathy, visual impairment; mild fever (after large I.M. dosage); hyperpyrexia; increased appetite and weight; a systemic lupus erythematosus-like syndrome; peripheral edema. NOTE: Sudden death in patients taking phenothiazines (apparently due to cardiac arrest or asphyxia due to failure of cough reflex) has been reported, but no causal relationship has been established.

Supplied: Tablets, 10 mg., 25 mg., 50 mg., 100 mg. and 200 mg., in bottles of 100; Spansule® capsules, 30 mg., 75 mg., 150 mg., 200 mg. and 300 mg., in bottles of 50; Injection, 25 mg./ml.; Syrup, 10 mg./5 ml.; Suppositories, 25 mg. and 100 mg.; Concentrate, 30 mg./ml. and 100 mg./ml.

Smith Kline & French Laboratories, Philadelphia SK&F

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THORAZINE®

brand of

C LOR ROMAZI E Tablets: 50 mg. of the HCl



Th TRIAVIL® Pot ntial in the management of moderate to severe anxiety with depression

When time and talk are not enough...
The therapist is the primary catalyst for change in the psychotherapeutic relationship. However, when patients suffer from moderate to severe anxiety with depression, there are situations when TRIAVIL can often be a useful adjunct.

...TRIAVIL may help
There are three important benefits you may expect when TRIAVIL is part of the treatment program: (1) When symptoms of moderate to severe anxiety or agitation with depression are relieved, the patient may become more accessible and cooperative. (2) As somatic manifestations are controlled, attention may be focused on underlying causative factors. (3) Symptomatic relief may enable the patient to function more effectively in his daily life while your work with the patient progresses.

Since it is simpler to remember to take one tablet rather than several (particularly in multiple daily doses), your patients on TRIAVIL will be more likely to take proper doses of the medication. And, of course, economy is an added factor in therapy with TRIAVIL.

Tablets TRIAVIL are available in four different combinations affording flexibility and individualized dosage adjustment. Close supervision of patients is essential until satisfactory remission has taken place. Suicide is inherent in any depressive illness so patients should not have easy access to large quantities of the drug. The drug may impair alertness and potentiate the response to alcohol. It should not be used during the acute recovery phase following myocardial infarction or given to patients who have received an MAOI within two weeks. TRIAVIL should be used with caution in glaucoma and in patients prone to urinary retention. It is contraindicated in CNS depression and in the presence of evidence of bone marrow depression.

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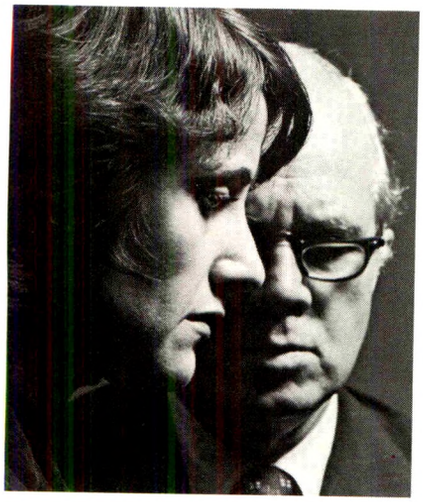
For a brief summary of prescribing information, please turn to the following page.

when patients exhibit moderate to marked anxiety or agitation with symptoms of depression

TRIAVIL® (containing perphenazine and amitriptyline HCl)

an antidepressant tranquilizer

when patients exhibit moderate to marked anxiety
or agitation with symptoms of depression



TRIAVIL® 4-25

Each tablet contains
4 mg. perphenazine and
25 mg. amitriptyline HCl

a formulation particularly suited to psychiatric practice when higher doses are required.

Also Available:
TRIAVIL® 2-25: Each tablet contains
2 mg. perphenazine and 25 mg. amitriptyline HCl.

TRIAVIL® 2-10: Each tablet contains
2 mg. perphenazine and 10 mg. amitriptyline HCl.

TRIAVIL® 4-10: Each tablet contains
4 mg. perphenazine and 10 mg. amitriptyline HCl.

INITIAL THERAPY FOR MANY PATIENTS
TRIAVIL® 2-25 (or TRIAVIL® 4-25) t.i.d. or q.i.d.

FOR FLEXIBILITY IN ADJUSTING MAINTENANCE THERAPY
TRIAVIL® 2-10 (or TRIAVIL® 4-10)

CONTRAINDICATIONS: Central nervous system depression from drugs (barbiturates, narcotics, analgesics, antihistamines) and alcohol; bone marrow depression; pregnancy; known hypersensitivity to phenothiazines or amitriptyline. Do not give concomitantly with MAOI drugs because hyperpyretic crises, severe convulsions, and deaths have occurred from such combinations. Allow minimum of 14 days between therapies, then initiate therapy with TRIAVIL cautiously, with gradual increase in dosage until optimum response is achieved. Not recommended for use during acute recovery phase following myocardial infarction. Not recommended in children.

WARNINGS: TRIAVIL should not be given with guanethidine or similarly acting compounds. Use cautiously in patients with history of urinary retention, narrow-angle glaucoma, increased ocular pressure, or convulsive disorders. Patients with cardiovascular disorders should be watched closely. Tricyclic antidepressants, including amitriptyline HCl, particularly in high doses, have been reported to produce arrhythmias, sinus tachycardia, and prolongation of conduction time. Myocardial infarction and stroke have been reported with tricyclic antidepressant drugs. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. Caution patients performing hazardous tasks, such as operating machinery or driving motor vehicles, that drug may impair mental and/or physical abilities.

PRECAUTIONS: Suicide is a possibility in depressed patients and may remain until significant remission occurs. Such patients should not have access to large quantities of this drug.
Perphenazine: Should not be used indiscriminately. Use with caution in patients who have previously exhibited severe adverse reactions to other phenothiazines. Likelihood of untoward actions is greater with high doses. Closely supervise with any dosage.
The antiemetic effect of perphenazine may obscure signs of toxicity due to overdosage of other drugs or make more difficult the diagnosis of disorders such as brain tumor or intestinal obstruction.
A significant, not otherwise explained, rise in body temperature may suggest individual intolerance to perphenazine, in which case discontinue.
If hypotension develops, epinephrine should not be employed, as its action is blocked and partially reversed by perphenazine.
Phenothiazines may potentiate the action of central nervous system depressants (opiates, analgesics, antihistamines, barbiturates, alcohol) and atropine. In concurrent therapy with any of these, TRIAVIL should be given in reduced dosage. May also potentiate the action of heat and phosphorous insecticides.
Amitriptyline: In manic-depressive psychosis, depressed patients may experience a shift toward the manic phase if they are treated with an antidepressant drug. Patients with paranoid symptomatology may have an exaggeration of such symptoms.
The tranquilizing effect of TRIAVIL has seemed to reduce the likelihood of this effect.
Supervise closely and carefully adjust dosage when given with anticholinergic agents and sympathomimetic drugs.
The drug may enhance the response to alcohol and the effects of barbiturates and other CNS depressants.
Concurrent administration of amitriptyline HCl and electroshock therapy may increase the hazards of therapy. Such treatment should be limited to patients for whom it is essential.
Discontinue several days before elective surgery if possible.
Elevation and lowering of blood sugar levels have both been reported.

ADVERSE REACTIONS: Similar to those reported with either constituent alone.
Perphenazine: Side effects may be any of those reported with phenothiazine drugs: extrapyramidal symptoms (opisthotonos, oculogyric crises, hyperreflexia, dystonia, akathisia, dyskinesia, parkinsonism) usually controlled by the concomitant use of effective antiparkinsonian drugs and/or by reduction in dosage, but sometimes persist after discontinuation of the phenothiazine; skin disorders (photosensitivity, itching, erythema, urticaria, eczema, up to exfoliative dermatitis); other allergic reactions (asthma, laryngeal edema, angioneurotic edema, anaphylactoid reaction); peripheral edema; reversed epinephrine effect; hyperglycemia; endocrine disturbances (lactation, galac-

torrhea, disturbances of menstrual cycle); altered cerebrospinal fluid proteins; paradoxical excitement; ECG abnormalities (quinidine-like effect); reactivation of psychotic processes; catatonic-like states; autonomic reactions, such as dryness of the mouth, headache, nausea, vomiting, constipation, obstipation, urinary frequency, blurred vision, nasal congestion, and a change in pulse rate; hypnotic effects; pigmentary retinopathy; corneal and lenticular pigmentation; occasional lassitude; muscle weakness; mild insomnia. Other adverse reactions reported with various phenothiazine compounds include blood dyscrasias (pancytopenia, thrombocytopenic purpura, leukopenia, agranulocytosis, eosinophilia); liver damage (jaundice, biliary stasis); grand mal convulsions; cerebral edema; polyphagia; photophobia; skin pigmentation; and failure of ejaculation.

Amitriptyline: Note: Listing includes a few reactions not reported for this drug, but which have occurred with other pharmacologically similar tricyclic antidepressant drugs. *Cardiovascular:* Hypotension; hypertension; tachycardia; palpitation; myocardial infarction; arrhythmias; heart block; stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus. *Anticholinergic:* Dry mouth; blurred vision; disturbance of accommodation; constipation; paralytic ileus; urinary retention; dilatation of urinary tract. *Allergic:* Skin rash; urticaria; photosensitivity; edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis; eosinophilia; purpura; thrombocytopenia. *Gastrointestinal:* Nausea; epigastric distress; vomiting; anorexia; stomatitis; peculiar taste; diarrhea; parotid swelling; black tongue. *Endocrine:* Testicular swelling and gynecomastia in the male; breast enlargement and galactorrhea in the female; increased or decreased libido; elevated or lowered blood sugar levels. *Other:* Dizziness; weakness; fatigue; headache; weight gain or loss; increased perspiration; urinary frequency; mydriasis; drowsiness; jaundice; alopecia. *Withdrawal Symptoms:* Abrupt cessation after prolonged administration may produce nausea, headache, and malaise. These are not indicative of addiction.

For more detailed information, consult your MSD Representative or see full Prescribing Information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486.

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Addendum

A suggested four-point rating scale to help evaluate patient progress week-to-week or month-to-month when presenting symptoms include anxiety or agitation with depression.

Mood—degree of depression (facial expression, voice quality, conversation content).

1. Continued profound depression, feelings of hopelessness.
2. Feeling "blue," chronic pessimism, rare cheerfulness.
3. Appropriate cheerfulness, slight depression, diluted pleasure capacity.
4. Appropriate cheerfulness and optimism.

Psychomotor Activity—reflective of emotional pressure (hypoactive patient).

1. Immobile, not fulfilling daily responsibilities.
2. Generalized slowness, constant fatigue.
3. Appropriate motor activity in most instances.
4. Activity appropriate in degree and duration to environmental stimuli.

Performance — vocational.

1. Unable to perform at all.
2. Works intermittently with difficulty.
3. Full-time employment, moderate pride in achievements.
4. Full-time employment, functioning efficiently, deriving pleasure from achievements.

Anxiety Amelioration — in terms of motor, affective, autonomic and verbal phenomenon.

1. Panic, incessant movement, state of terror.
2. Moderate restlessness, pacing, moderate expression of fear.
3. Slight restlessness, slight affective expression of fear.
4. Calm, no restlessness, expression of fear (when it occurs) appropriate to severity of stress.

Amelioration of Symptoms

1. Symptoms unchanged or worse.
2. Fair, slight improvement, patient still plagued with symptoms.
3. Symptoms markedly reduced in intensity and frequency, able to cope.
4. All presenting symptoms gone.

Adapted from Lesse, S.: Anxiety, Its Components, Development and Treatment, Grune & Stratton, New York, 1970.

R.S.V.P.



She just doesn't respond to things. No interest. No energy. Discouraged.

It may be mild depression. She needs help...and she needs it now.

Counsel and reassurance may suffice. But if you decide supportive medication is indicated, Ritalin can offer prompt benefit.

Ritalin usually begins to act with the very first dose...boosts spirits and brightens mood...helps the patient get moving again. And Ritalin is generally well tolerated, even by older and convalescent patients. However, Ritalin should not be used for severe depression.

When Ritalin works, one prescription may be enough... to help provide an answer to mild depression.

Ritalin®
(methylphenidate) helps the patient respond in mild depression*

Ritalin® hydrochloride ℂ
(methylphenidate hydrochloride)

TABLETS

INDICATION
Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, FDA has classified the indication as follows:
"Possibly" effective: Mild depression
Final classification of the less-than-effective indications requires further investigation.

CONTRAINDICATIONS
Marked anxiety, tension, and agitation, since Ritalin may aggravate these symptoms. Also contraindicated in patients known to be hypersensitive to the drug and in patients with glaucoma.

WARNINGS
Ritalin should not be used in children under six years, since safety and efficacy in this age group have not been established.
Sufficient data on safety and efficacy of long-term use of Ritalin in children with minimal brain dysfunction are not yet available.
Although a causal relationship has not been established, suppression of growth (*ie*, weight gain and/or height) has been reported with long-term use of stimulants in children. Therefore, children requiring long-term therapy should be carefully monitored.
Ritalin should not be used for severe depression of either exogenous or endogenous origin or for the prevention of normal fatigue states.
Ritalin may lower the convulsive threshold in patients with or without prior seizures; with or without prior EEG abnormalities, even in absence of seizures. Safe concomitant use of anticonvulsants and Ritalin has not been established. If seizures occur, Ritalin should be discontinued.
Use cautiously in patients with hypertension. Blood pressure should be monitored at appropriate intervals in all patients taking Ritalin, especially those with hypertension.
Drug Interactions
Ritalin may decrease the hypotensive effect of guanethidine. Use cautiously with pressor agents and MAO inhibitors. Ritalin may inhibit the metabolism of coumarin anticoagulants, anticonvulsants (phenobarbital, diphenylhydantoin, primidone), phenylbutazone, and tricyclic antidepressants (imipramine, desipramine). Downward dosage adjustments of these drugs may be required when given concomitantly with Ritalin.
Usage in Pregnancy
Adequate animal reproduction studies to establish safe use of Ritalin during pregnancy have not been conducted. Therefore, until more information is available, Ritalin should not be prescribed for women of childbearing age unless, in the opinion of the physician, the potential benefits outweigh the possible risks.

Drug Dependence
Ritalin should be given cautiously to emotionally unstable patients, such as those with a history of drug dependence or alcoholism, because such patients may increase dosage on their own initiative.

Chronically abusive use can lead to marked tolerance and psychic dependence with varying degrees of abnormal behavior. Frank psychotic episodes can occur, especially with parenteral abuse. Careful supervision is required during drug withdrawal, since severe depression as well as the effects of chronic overactivity can be unmasked. Long-term follow-up may be required because of the patient's basic personality disturbances.

PRECAUTIONS
Patients with an element of agitation may react adversely; discontinue therapy if necessary.
Periodic CBC, differential, and platelet counts are advised during prolonged therapy.

ADVERSE REACTIONS
Nervousness and insomnia are the most common adverse reactions but are usually controlled by reducing dosage and omitting the drug in the afternoon or evening. Other reactions include: hypersensitivity (including skin rash, urticaria, fever, arthralgia, exfoliative dermatitis, erythema multiforme with histopathological findings of necrotizing vasculitis, and thrombocytopenic purpura); anorexia; nausea; dizziness; palpitations; headache; dyskinesia; drowsiness; blood pressure and pulse changes, both up and down; tachycardia; angina; cardiac arrhythmia; abdominal pain; weight loss during prolonged therapy. Toxic psychosis has been reported.
Although a definite causal relationship has not been established, the following have been reported in patients taking this drug: leukopenia and/or anemia; a few instances of scalp hair loss.
In children, loss of appetite, abdominal pain, weight loss during prolonged therapy, insomnia, and tachycardia may occur more frequently; however, any of the other adverse reactions listed above may also occur.

DOSAGE AND ADMINISTRATION
Adults
Administer orally in divided doses 2 or 3 times daily, preferably 30 to 45 minutes before meals. Dosage will depend upon indication and individual response.
Average dosage is 20 to 30 mg daily. Some patients may require 40 to 60 mg daily. In others, 10 to 15 mg daily will be adequate. The few patients who are unable to sleep if medication is taken late in the day should take the last dose before 6 p.m.

HOW SUPPLIED
Tablets, 20 mg (peach, scored); bottles of 100 and 1000.
Tablets, 10 mg (pale green, scored); bottles of 100, 500, 1000 and Accu-pak blister units of 100.
Tablets, 5 mg (pale yellow); bottles of 100, 500 and 1000.
Consult complete product literature before prescribing.

CIBA Pharmaceutical Company
Division of CIBA-GEIGY Corporation
Summit, New Jersey 07901

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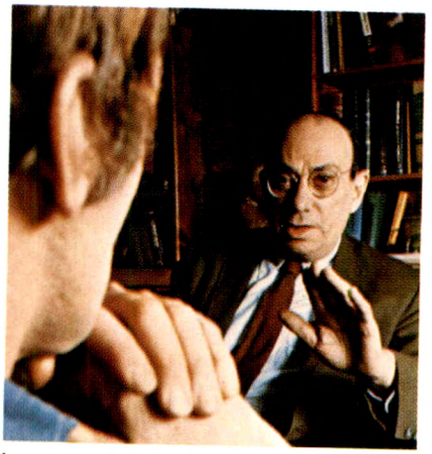
*This drug has been evaluated as possibly effective for this indication. See brief prescribing information.

CIBA

The balanced approach in adjunctive drug therapy

Especially relevant in psychiatric practice

The role of anxiety as a psychodynamic force is generally acknowledged, although psychiatrists may differ as to its definition, origin and management. The intensity of anxiety may at times require adjunctive drug therapy for prompt relief of intolerable suffering; abatement of emotional tension, so that rapport and verbal communication may be expedited; and breaking down of stubborn resistances so that maladaptive behavior may



be examined.

But anxiety—in moderation an appropriate accompaniment of growth—need not and should not be diminished to the point of extinguishing its *signal* function.

Drug and dosage should be selected so as to allow the maintenance and continuation of a reasonable amount of anxiety as an incentive to motivate participation in psychotherapy and to encourage problem-solving on the patient's own initiative. In this context, the so-called minor tranquilizers, in contrast to major tranquilizers, exhibit a well-tolerated, predominantly anti-anxiety action. Thus, when drug therapy of obstructive anxiety is required, a suitable minor tranquilizer is often recommended.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of

Antianxiety action without exaggerated effect

Librium (chlordiazepoxide HCl) dosage meets patient needs

The benzodiazepines are regarded as among the safer and more effective of the antianxiety drugs available. Adjunctive Librium enjoys extensive use in the treatment of clinically significant anxiety. It should be employed flexibly, titrated to the degree of anxiety being experienced by the individual patient. The dosage schedule should have as its goal the maximum relief of disruptive anxiety; when that



has been accomplished, Librium (chlordiazepoxide HCl) therapy should be discontinued. Experience has shown that Librium, in proper dosage, seldom impairs mental acuity or performance. (See Warnings section below.)

Drowsiness, ataxia and confusion are the most common side effects reported, most notably in the elderly or debilitated. Thus, Librium is especially valuable in treating anxiety in the neurotic ambulatory patient with daily responsibilities to fulfill. In most cases, Librium can promptly reduce excessive anxiety to less disruptive levels, making a rational approach to discussion of disturbing psychic material more possible, and encouraging a more positive resolution of the patient's emotional problems.

for control of inappropriate anxiety

Librium®
(chlordiazepoxide HCl)

10-mg, 25-mg capsules t.i.d./q.i.d.

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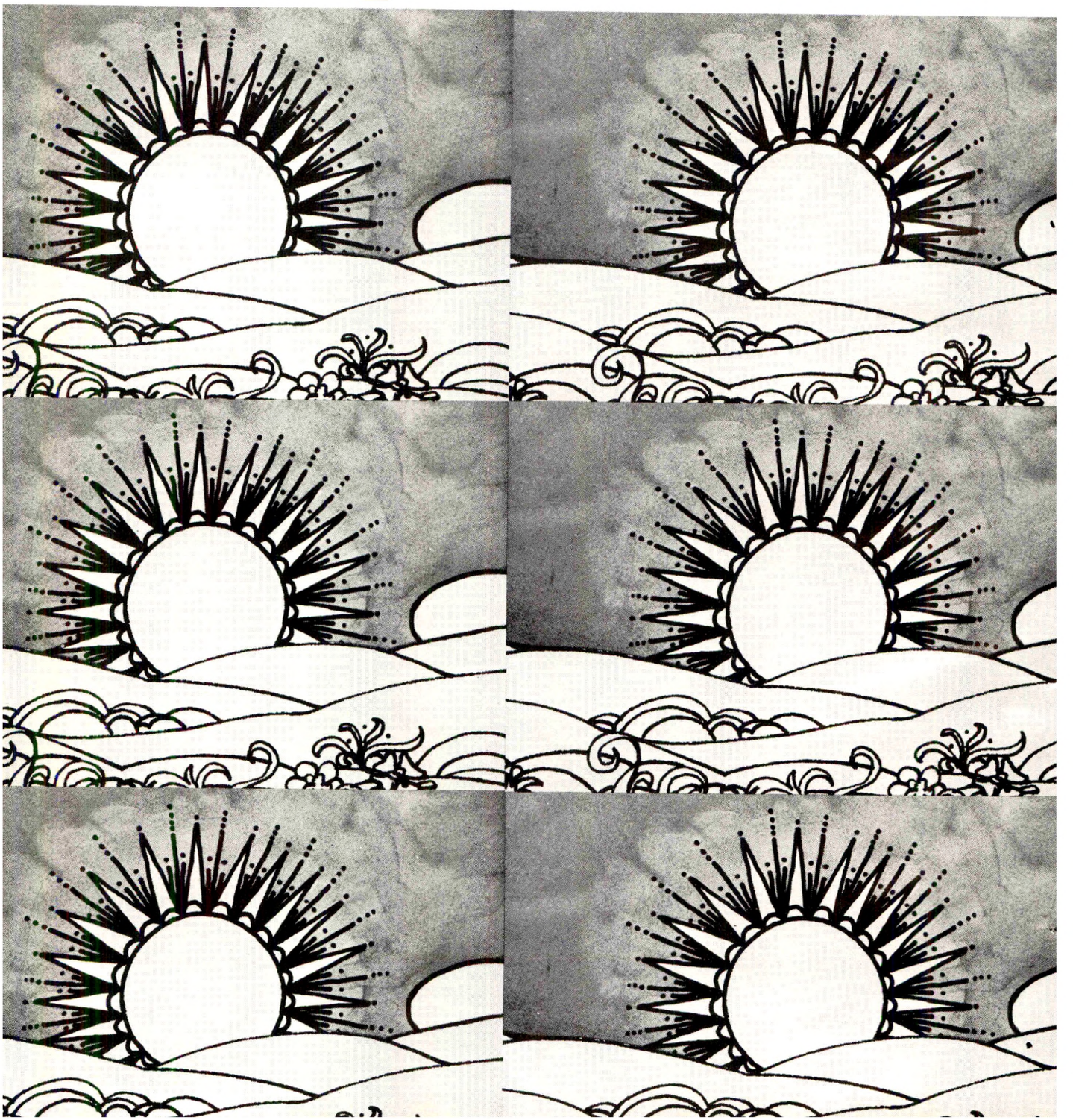
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impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido —all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Supplied: Librium® Capsules containing 5 mg, 10 mg or 25 mg chlordiazepoxide HCl. Libritabs® Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.

The new-day constant for drug-induced parkinsonism:



ARTANE®
TRIHEXYPHENIDYL HCl

Non-cumulative action makes each day of therapy a new day



That's why ARTANE is ideally suited for the patient on long-term phenothiazine therapy. In economical tablets or SEQUELS Sustained Release Capsules*, it offers you *more* than the rapid reversal of extrapyramidal symptoms.

Usually there is no drug buildup to cause undue toxicity in prolonged therapy. Minimal atropine-like side effects. Accurate dosage titration in adjunctive use. And, to minimize missed doses and anxiety in outpatient therapy— one-dose *all-day* control or prevention with SEQUELS.*

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Tablets—2 mg, 5 mg; Elixir†—2 mg/5 cc or SEQUELS® Sustained Release Capsules—5 mg.

Tablets and Elixir Indications: FDA has evaluated this drug as Effective as an adjunct in the therapy of the indications listed below under SEQUELS.

***INDICATIONS FOR ARTANE SEQUELS:**
Based on a review of this drug in sustained release form by the National Academy of Sciences-National Research Council and/or other information, FDA has classified the indications as follows: Probably effective as an adjunct in the therapy of all forms of parkinsonism (postencephalitic, arteriosclerotic, and idiopathic) and for use in the prevention or control of extrapyramidal disorders due to central nervous system drugs such as reserpine and phenothiazines.

WARNING:
Patients to be treated should have a gonioscope evaluation and close monitoring of intraocular pressures at regular periodic intervals.

Precautions: Patients with cardiac, liver or kidney disorders or with hypertension should be maintained under close observation. In long-term therapy, take care to avoid allergic and other untoward reactions. Use with caution in patients with glaucoma, obstructive disease of the gastrointestinal or genitourinary tracts and in elderly males with possible prostatic hypertrophy. Geriatric patients require strict dosage regulation. Incipient glaucoma may be precipitated.

Adverse Reactions: Such effects as dryness of mouth, blurring of vision, dizziness, nausea or nervousness will be experienced by 30 to 50 per cent of patients. (These tend to lessen and can often be controlled by adjusting dosage.) Isolated instances of suppurative parotitis, skin rashes, dilation of the colon, paralytic ileus, delusions, hallucinations and paranoia (1 doubtful case) have been reported. Patients with arteriosclerosis or with a history of idiosyncrasy to drugs may exhibit mental confusion, agitation, disturbed behavior, or nausea and vomiting. If a severe reaction occurs, discontinue drug for a few days, then resume at lower dosage. Psychiatric disturbances can result from overdosage to sustain euphoria. Side effects of any atropine-like drugs include constipation, drowsiness, urinary hesitancy or retention, tachycardia, dilation of the pupil, increased intraocular tension, weakness, vomiting and headache.

†Lime-mint flavored, with 0.08% methylparaben, 0.02% propylparaben, and 5% alcohol as preservatives.

*This drug in sustained release form has been evaluated as probably effective. See Brief Summary.

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716-3
A53

Today, she managed a smile



(Not long ago, she couldn't stop sobbing)

Before he sees that first positive response—however hesitant and tentative—the physician may have to bring into play many different aspects of therapy. Establishing a therapeutic relationship may be the first difficulty as well as the first necessity. Psychotherapy, family and community support, occupational and social counseling, and drug therapy may all have to be enlisted.

The characteristically rapid energizing action of VIVACTIL may help establish early therapeutic rapport by lessening the patient's lethargy—often during the first week of medication. VIVACTIL helps elevate mood, usually within the third or fourth week of treatment.

Characteristically, the drug has no sedating or tranquilizing properties. (Symptoms such as anxiety or agitation may be aggravated.)

Dosage of VIVACTIL must be individualized, and patients should be under close medical supervision. For many adult patients with clinically significant depression, 10 mg t.i.d. may provide control of symptoms. Others may require as little as 15 mg or as much as 60 mg a day. In elderly patients and adolescents, lower dosages are recommended.

In depression,

TABLETS, 5 mg and 10 mg

Vivactil®

(Protriptyline HCl | MSD) helps establish early therapeutic rapport

Contraindications: Known hypersensitivity; acute recovery phase following myocardial infarction. Not recommended for use in children. Should not be given concomitantly with an MAOI; hyperpyretic crises, severe convulsions, and deaths have occurred in patients receiving tricyclic antidepressant and MAOI drugs simultaneously. When it is desired to substitute protriptyline HCl for an MAOI, a minimum of 14 days should be allowed to elapse after the latter is discontinued. Protriptyline HCl should then be initiated cautiously with gradual increase in dosage until optimum response is achieved.

Warnings: May block the antihypertensive effect of guanethidine or similarly acting compounds. May impair mental and/or physical abilities required for the performance of hazardous tasks, such as operating machinery or driving a motor vehicle. Should be used with caution in patients with a history of seizures and, because of its autonomic activity, in patients with a tendency to urinary retention or increased intraocular tension.

Tachycardia and postural hypotension may occur more frequently than with other antidepressant drugs. Should be used with caution in elderly patients and patients with cardiovascular disorders; such patients should be observed closely because of the tendency of the drug to produce tachycardia, hypotension, arrhythmias, and prolongation of the conduction time. Myocardial infarction and stroke have occurred with drugs of this class. On rare occasions, hyperthyroid patients or those receiving thyroid medication may develop arrhythmias when this drug is given.

Usage in Children: Not recommended for use in children because safety and effectiveness in the pediatric age group have not been established.

Usage in Pregnancy: Safe use in pregnancy and lactation has not been established; therefore, use in pregnant women, nursing mothers, or women who may become pregnant requires that possible benefits be weighed against possible hazards to mother and child.

Precautions: When protriptyline HCl is used to treat the depressive component of schizophrenia, psychotic symptoms may be aggravated; likewise, in manic-depressive psychosis, depressed patients may experience a shift toward the manic phase; paranoid delusions, with or without associated hostility, may be exaggerated. In any of these circumstances, it may be advisable to reduce the dose of protriptyline HCl or to use a major tranquilizing drug, such as perphenazine, concurrently. Symptoms, such as anxiety or agitation, may be aggravated in overactive or agitated patients.

When given with anticholinergic agents or sympathomimetic drugs, close supervision and careful adjustment of dosages are required. In healthy test subjects, maximum therapeutic doses significantly potentiated the peripheral circulatory effects of intravenous norepinephrine and epinephrine (manifested by undue increase in systolic and diastolic blood pressure and decrease in pulse rate). May enhance the response to alcohol and the effects of barbiturates and other CNS depressants. The possibility of suicide in depressed patients remains during treatment and until significant remission occurs; this type of patient should not have easy access to large quantities of the drug. Concurrent administration with electroshock therapy may increase the hazards of therapy; such treatment should be limited to patients for whom it is essential. Discontinue the drug several days before elective surgery, if possible.

Adverse Reactions: *Note:* Included in this listing are a few adverse reactions which have not been reported with this specific drug. However, the pharmacologic similarities among the tricyclic antidepressant drugs require that each of the reactions be considered when protriptyline HCl is administered. Protriptyline HCl is more likely to aggravate agitation and anxiety and produce cardiovascular reactions such as tachycardia and hypotension.

Cardiovascular: hypotension, hypertension, tachycardia, palpitation, arrhythmias.

CNS and Neuromuscular: confusional states (especially in the elderly); disorientation; delusions; hallucinations; anxiety; agitation; restlessness; insomnia; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremor; seizures.

Anticholinergic: dry mouth and, rarely, associated sublingual adenitis; blurred vision; disturbance of accommodation; mydriasis; constipation; urinary retention; dilatation of the urinary tract.

Other: skin rash, petechiae, urticaria, itching, photosensitization (avoid excessive exposure to sunlight), edema (general, or of face and tongue), nausea, vomiting, epigastric distress, anorexia, peculiar taste, stomatitis, parotid swelling, impotence, jaundice (simulating obstructive), drowsiness, dizziness, weakness, fatigue, headache, perspiration, weight gain or loss, urinary frequency.

Withdrawal Symptoms: In an occasional patient, abrupt cessation of treatment after prolonged administration may produce nausea, headache, and malaise. These are not indicative of addiction.

The following adverse reactions have been reported less frequently with the class of antidepressant agent to which protriptyline HCl belongs: myocardial infarction, heart block, stroke, panic, nightmares, alteration in EEG patterns, hypomania, exacerbation of psychosis, extrapyramidal symptoms, tinnitus, paralytic ileus, delayed micturition, drug fever, bone-marrow depression, agranulocytosis, eosinophilia, purpura, thrombocytopenia, diarrhea, abdominal cramps, black tongue, testicular swelling and gynecomastia in the male, breast enlargement and galactorrhea in the female, increased or decreased libido, altered liver function, flushing, nocturia, alopecia.

Supplied: Tablets, containing 5 mg and 10 mg protriptyline HCl each, in single-unit packages of 100 and bottles of 100 and 1000.

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

MSD
MERCK SHARP DOHME

addendum

MSD 26 5 mg (orange)

MSD 47 10 mg (yellow)

The usual regimen for adults is 15 to 40 mg a day divided into three or four doses. Dosage may be increased to 60 mg a day if necessary.

In elderly and adolescent patients, lower dosages are recommended; initially, a regimen of 5 mg t.i.d. is suggested with adjustment as necessary to the required amount. In elderly patients, the cardiovascular system must be monitored closely when the daily dose exceeds 20 mg.

Because VIVACTIL (Protriptyline HCl, MSD) characteristically is a nonsedating tricyclic antidepressant, activating and energizing in effect, the last dose of the day should be given no later than mid-afternoon to avoid insomnia. Required increases should be added to the morning dose.

When necessary to increase dosage, it should be done gradually. After satisfactory improvement has been achieved, dosage should be reduced to the smallest amount that will maintain relief of symptoms. Maintenance therapy should be continued for at least three months after satisfactory improvement occurs.

(*Usage in Children:* In view of the lack of experience in children, this drug is not recommended for patients under 12 years of age.)

Three new JIS publications:

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AUTHORS: Raymond Glasscote, Jerome H. Jaffe, James N. Sussex, John Ball, Leon Brill

What can a community that wants to do something about a perceived drug abuse problem reasonably expect to get for its efforts? That is the question the authors undertook to answer through a field study that consisted of visits to nine programs operating more than forty facilities and components for various categories of persons who use drugs — mainly narcotics. They conclude that no single one of the presently available approaches can be expected to be successful with more than a small percentage of the drug-abusing population, and all approaches combined will have an "undoubtedly limited" effect. Rather than take a position for or against any particular treatment approach, they discuss the positive and negative features of each. A wealth of significant detail is provided about a number of well-known programs, with an objectivity that has been altogether too rare in this field. The authors set forth one reasonable sequence that might be followed by communities seeking to establish various drug treatment resources that will be appropriate for their particular needs.

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AUTHORS: Raymond Glasscote, Michael Fishman, Meyer Sonis

This tenth in a series of Joint Information Service field studies of mental health programs focuses on the efforts of federally assisted mental health centers to meet the needs of children and adolescents, both through direct treatment services and through consultation programs that seek to enhance the competence of numerous kinds of persons who have an important influence on the lives of children. Based on visits by the authors and consultants to eight outstanding programs, this volume also incorporates the findings of a questionnaire survey to all federally supported community mental health centers. It also provides a full but concise history of treatment efforts for young people in this country, and, most important, it sets forth a hypothetical comprehensive program that is broader than any single program presently operating in the United States.

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PREPARED BY Charles Kanno

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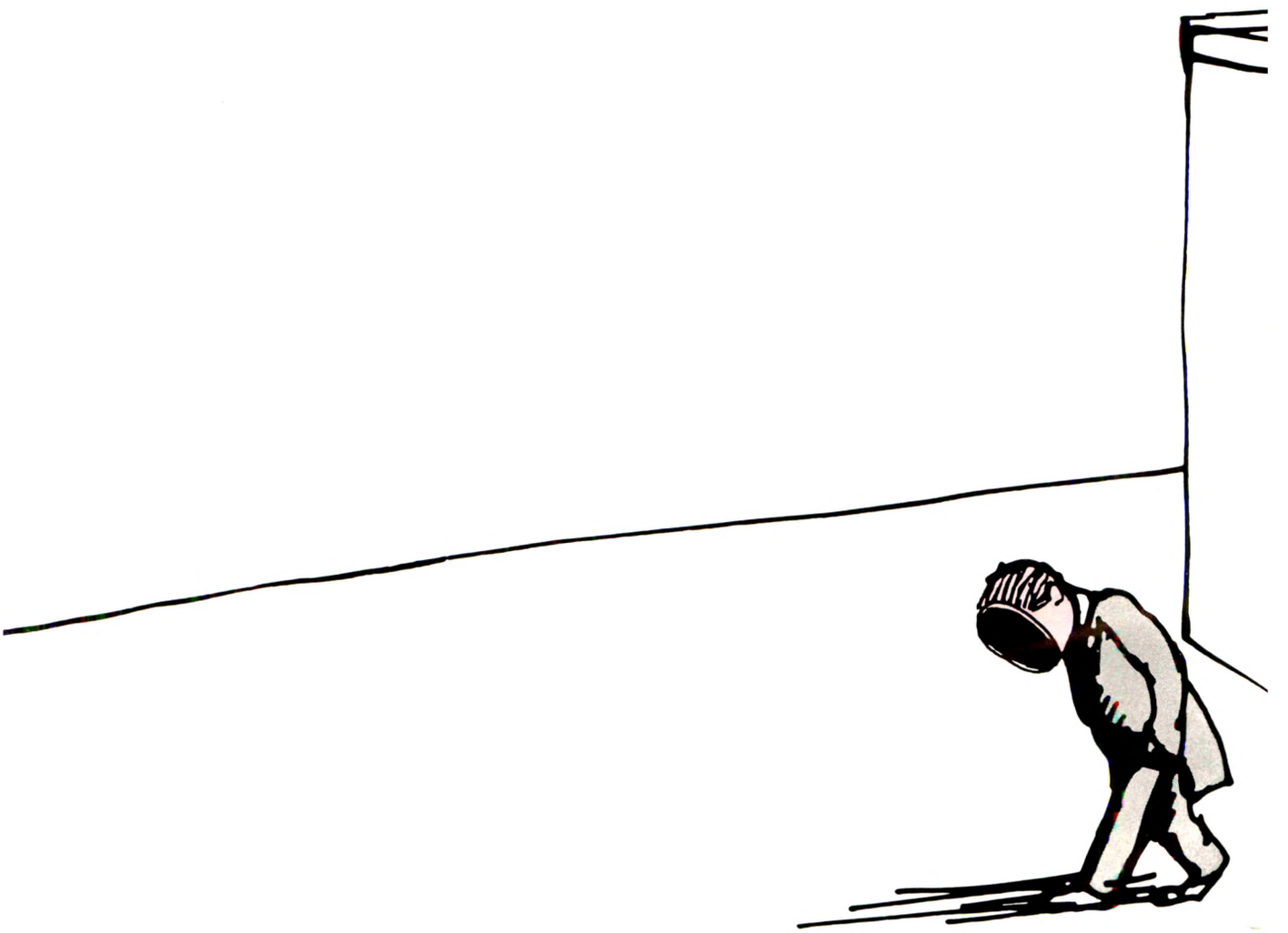
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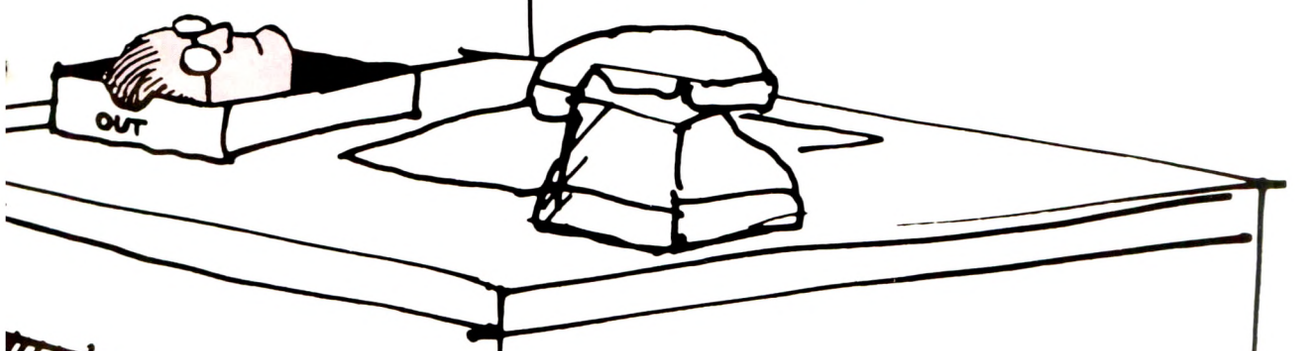


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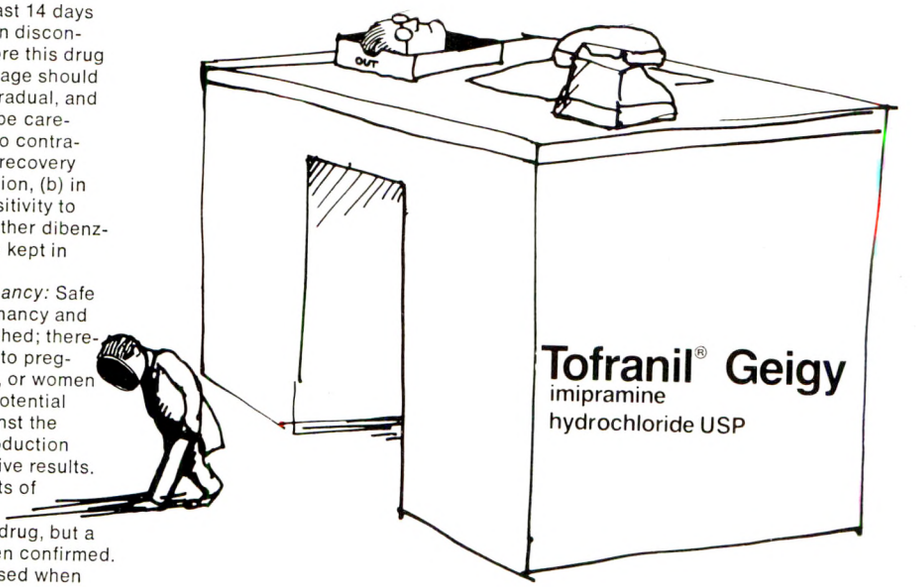
Please read the prescribing information for details of usage, precautions, warnings, contraindications, adverse experiences, and dosage recommendations. A summary of this information appears on the following page.

Geigy

Tofranil®
imipramine hydrochloride USP

Tofranil® imipramine hydrochloride USP

When depression comes to mind...



Contraindications: The concomitant use of this agent and monoamine oxidase inhibiting (M.A.O.I.) compounds is contraindicated. Hyperpyretic crises or severe convulsive seizures may occur. Potentiation of adverse effects can be serious or even fatal. An interval of at least 14 days after M.A.O.I. therapy has been discontinued should be allowed before this drug may be substituted. Initial dosage should be low, increases should be gradual, and the patient's progress should be carefully observed. The drug is also contraindicated (a) during the acute recovery period after myocardial infarction, (b) in patients with known hypersensitivity to the drug. Cross-sensitivity to other dibenzazepine compounds should be kept in mind.

Warnings: *Usage in Pregnancy:* Safe use of imipramine during pregnancy and lactation has not been established; therefore, in administering the drug to pregnant patients, nursing mothers, or women of childbearing potential, the potential benefits must be weighed against the possible hazards. Animal reproduction studies have yielded inconclusive results. There have been clinical reports of congenital malformation associated with the use of this drug, but a causal relationship has not been confirmed.

Extreme caution should be used when this drug is given to:

- patients with cardiovascular disease because of the possibility of conduction defects, arrhythmias, myocardial infarction, strokes and tachycardia;
- patients with increased intraocular pressure, history of urinary retention, or history of narrow-angle glaucoma because of the drug's anticholinergic properties;
- hyperthyroid patients or those on thyroid medication because of the possibility of cardiovascular toxicity;
- patients with a history of seizure disorder because this drug has been shown to lower the seizure threshold;
- patients receiving guanethidine or similar agents since imipramine may block the pharmacologic effects of these drugs.

Usage in Children: Pending evaluation of results from clinical trials in children, the drug is not recommended for use in patients under twelve years of age.

Since the drug may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks, such as operating an automobile or machinery, the patient should be cautioned accordingly.

Precautions: Because of the possibility of suicide in seriously depressed patients, careful supervision during the early phase of treatment is necessary and hospitalization may be required. Prescriptions should be written for the smallest amount feasible.

Hypomanic or manic episodes may occur, particularly in patients with cyclic disorders. Such reactions may necessitate discontinuation of the drug. If needed, imipramine may be resumed in lower dosage when these episodes are relieved. Administration of a tranquilizer may be useful in controlling such episodes.

Prior to elective surgery, imipramine should be discontinued for as long as the clinical situation will allow.

An activation of the psychosis may occasionally be observed in schizophrenic patients and may require reduction of dosage and the addition of a phenothiazine.

In occasional susceptible patients or in those receiving anticholinergic drugs (including antiparkinsonism agents) in addition, the atropine-like effects may become more pronounced (e.g. paralytic ileus). Close supervision and careful adjustment of dosage is required when this drug is administered concomitantly with anticholinergic or sympathomimetic drugs.

Patients should be warned that the concomitant use of alcoholic beverages may be associated with exaggerated effects.

Both elevation and lowering of blood sugar levels have been reported.

Concurrent administration of imipramine with electroshock therapy may increase the hazards; such treatment should be limited to those patients for whom it is essential.

Adverse Reactions: *Cardiovascular:* Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke, falls.

Psychiatric: Confusional states (especially in the elderly) with hallucinations, disorientation, delusions; anxiety, restlessness, agitation; insomnia and nightmares; hypomania; exacerbation of psychosis.

Neurological: Numbness, tingling, paresthesias of extremities; incoordination, ataxia, tremors; peripheral neuropathy; extrapyramidal symptoms; seizures, alterations in EEG patterns; tinnitus.

Anticholinergic: Dry mouth, and, rarely, associated sublingual adenitis; blurred vision, disturbances of accommodation, mydriasis; constipation, paralytic ileus; urinary retention, delayed micturition, dilation of the urinary tract.

Allergic: Skin rash, petechiae, urticaria, itching, photosensitization (avoid excessive exposure to sunlight); edema (general or of face and tongue), drug fever, cross-sensitivity with desipramine.

Hematologic: Bone marrow depression including agranulocytosis; eosinophilia; purpura; thrombocytopenia. Leukocyte and differential counts should be performed in any patient who develops fever and sore throat during therapy; the drug should be discontinued if there is evidence of pathological neutrophil depression.

Gastrointestinal: Nausea and vomiting, anorexia, epigastric distress, diarrhea; peculiar taste, stomatitis, abdominal cramps, black tongue.

Endocrine: Gynecomastia in the male; breast enlargement and galactorrhea in the female; increased or decreased libido, impotence; testicular swelling; elevation or depression of blood sugar levels.

Other: Jaundice (simulating obstructive); altered liver function; weight gain or loss; perspiration; flushing; urinary frequency; drowsiness, dizziness, weakness and fatigue; headache; parotid swelling; alopecia.

Withdrawal Symptoms: Though not indicative of addiction, abrupt cessation of treatment after prolonged therapy may produce nausea, headache and malaise.

How Supplied: Round tablets of 25 and 50 mg.; triangular tablets of 10 mg. for geriatric and adolescent use; and ampuls, each containing 25 mg. in 2 cc. for I.M. administration. (B)98-146-850-J (7/71)

For complete details, including dosage, please refer to the full prescribing information.

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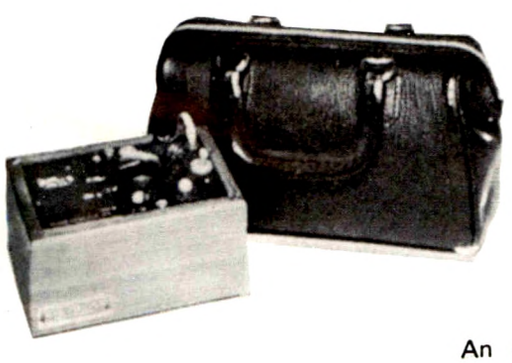
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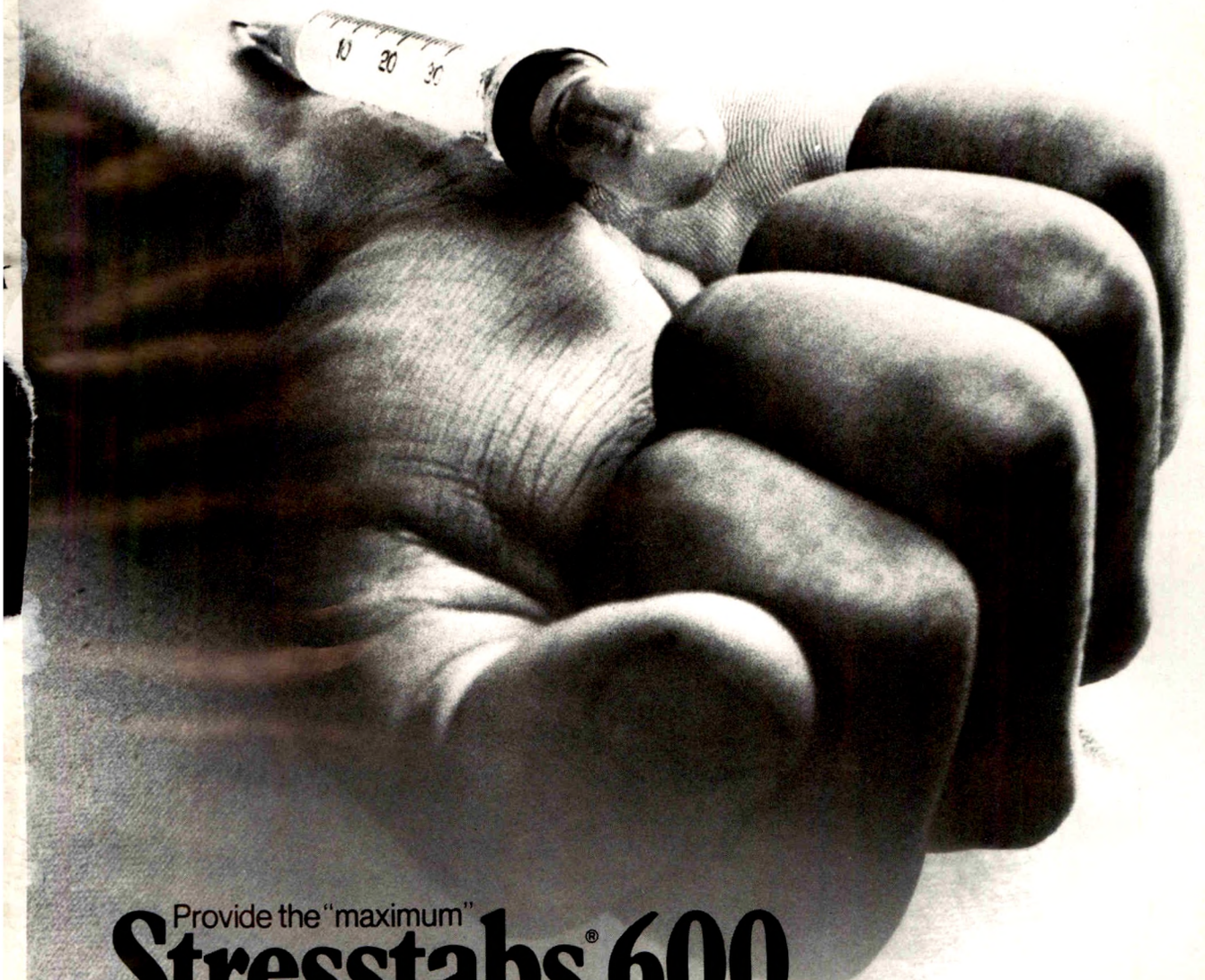
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Stresstabs® 600

High Potency Stress Formula Vitamins

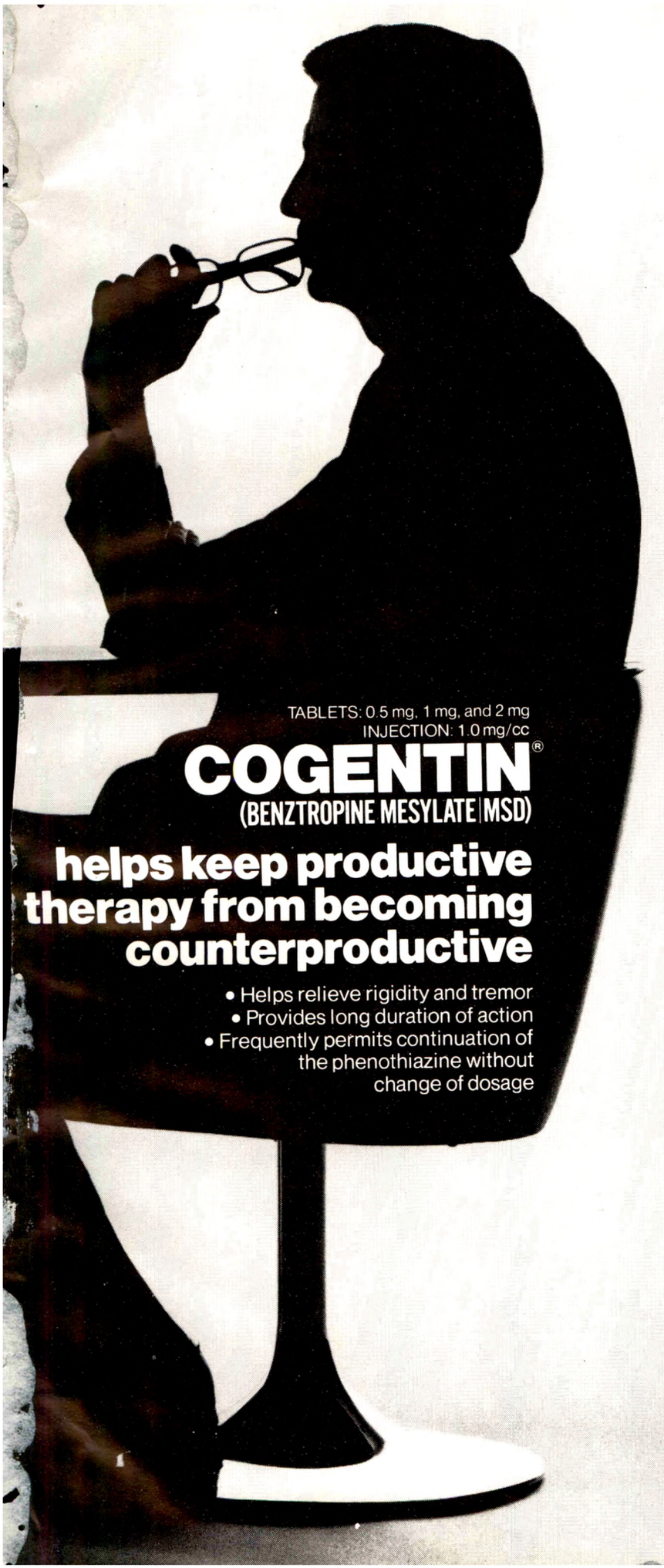
Each Tablet Contains:

Vitamin B_1 (as Thiamine Mononitrate)	15 mg (15 MDR)
Vitamin B_2 (Riboflavin)	15 mg (12½ MDR)
Vitamin B_6 (Pyridoxine Hydrochloride)	5 mg
Vitamin B_{12} (as present in concentrated extractives from streptomyces fermentation)	5 mcgm
Vitamin C (as Sodium Ascorbate and Niacinamide Ascorbate)	600 mg (20 MDR)
Niacinamide (as Niacinamide Ascorbate)	100 mg (10 MDR)
Vitamin E (as *d*-Alpha Tocopheryl Acid Succinate)	30 Units
Calcium Pantothenate USP	20 mg

MDR—Adult Minimum Daily Requirement. Recommended Intake: Adults, 1 tablet daily or as directed by physician. Supplied: Bottles of 60 and 500.

Lederle LEDERLE LABORATORIES, Division of American Cyanamid Company, Pearl River, New York 10965 732-3


when
extrapyramidal
symptoms upset
phenothiazine
therapy



TABLETS: 0.5 mg, 1 mg, and 2 mg
INJECTION: 1.0 mg/cc

COGENTIN®
(BENZTROPINE MESYLATE | MSD)

helps keep productive therapy from becoming counterproductive

- Helps relieve rigidity and tremor
- Provides long duration of action
- Frequently permits continuation of the phenothiazine without change of dosage

Contraindications: Children under three years of age; use cautiously in older children.

Warnings: Safe use in pregnancy not established. May impair mental and/or physical abilities required for performance of hazardous tasks, such as operating machinery or driving a motor vehicle.

Precautions: Because of cumulative action, continued supervision is advisable. Closely observe patients with tendencies to tachycardia or hypotension and those with prostatic hypertrophy. Dysuria may occur, but rarely becomes a problem. Large doses may cause complaints of weakness and inability to move particular muscle groups, requiring dosage adjustment.

Mental confusion and excitement may occur with large doses, or in susceptible patients; visual hallucinations reported occasionally. May intensify mental symptoms when used to treat extrapyramidal disorders due to CNS drugs, such as reserpine and phenothiazines, in patients with mental disorders; in such patients, increased doses of antiparkinsonian drugs can precipitate toxic psychosis; observe patients carefully, especially at the beginning of treatment or if dosage is increased. Masking action on possible development of permanent extrapyramidal symptoms with prolonged phenothiazine therapy has not been investigated. Patients with a poor mental outlook are usually poor candidates for therapy.

May produce anhidrosis; give with caution during hot weather, especially to the old, the chronically ill, the alcoholic, those who have central nervous system disease, those who do manual labor in a hot environment, and those with disturbances in sweating. If anhidrosis appears, reduce dosage so that ability to maintain body heat equilibrium is not impaired. Occurrence of glaucoma is a possibility; probably should not be used in angle-closure glaucoma.

Large doses generally cannot be tolerated by older patients, thin patients, or patients with arteriosclerotic parkinsonism. Do not terminate other antiparkinsonism agents abruptly; reduce gradually. In drug-induced parkinsonism, closely observe patients for severe reactions, and temporarily discontinue COGENTIN (Benztropine Mesylate, MSD) if they appear; do not extend therapy longer than necessary to counteract the extrapyramidal disorders; although the psychotropic drug frequently can be continued without change of dosage, a decrease might be indicated.

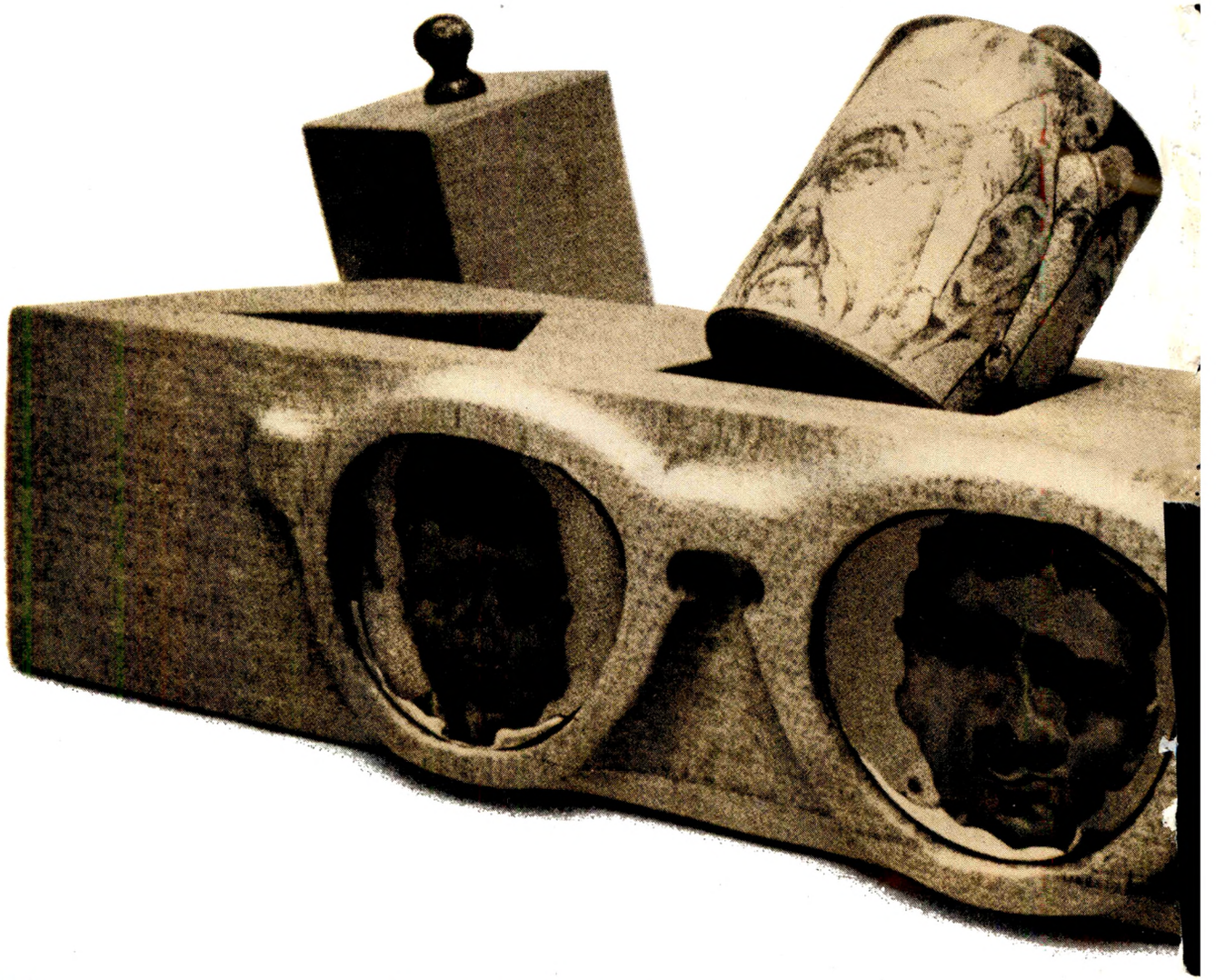
Adverse Reactions: Adverse reactions may be anticholinergic and/or antihistaminic. Dry mouth, blurred vision, nausea, nervousness may develop. If dry mouth causes difficulty in swallowing or speaking, or loss of appetite and weight, reduce dosage, or discontinue drug temporarily. Vomiting occurs infrequently and may be controlled by temporary discontinuation, followed by resumption at a lower dosage. Constipation, numbness of the fingers, listlessness, and depression may develop. Occasionally, an allergic reaction, e.g., skin rash, develops; sometimes this can be controlled by reducing dosage, but occasionally requires discontinuation.

Supplied: Tablets in three strengths: 0.5 mg and 1 mg benztropine mesylate, in bottles of 100, and 2 mg benztropine mesylate, in bottles of 100 and 1000. Injection, containing 1.0 mg benztropine mesylate and 9.0 mg sodium chloride per cc, in 2-cc ampuls.

For more detailed information, consult your MSD representative or see the Direction Circular. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

MSD MERCK SHARP & DOHME

H lp im,rov you. d r d patients' ability to cope.



In Brief:

Actions: Norpramin® (desipramine hydrochloride) is an antidepressant drug of the tricyclic type. It has been found in some studies to have a more rapid onset of action than imipramine; antidepressant efficacy is similar though potency on a weight basis may be less. The earliest manifestations consist mainly of an increase in psychomotor activity. Full treatment benefit is seldom attained before the end of the second week.

Indications: Norpramin® (desipramine hydrochloride) is indicated for the relief of depressive symptoms. Endogenous depressions are more likely to be alleviated than others.

Contraindications: Desipramine hydrochloride should not be given within two weeks of treatment with a monoamine oxidase inhibitor. Contraindications include the acute recovery period following myocardial infarction and hypersensitivity to the drug. Cross sensitivity with other dibenzazepines is a possibility.

Warnings: 1. Extreme caution should be used in patients: (a) with cardiovascular disease, (b) with a history of urinary retention or glaucoma, (c) with thyroid disease or those on thyroid medication, (d) with a history of seizure disorder. 2. This drug is capable of blocking the antihypertensive effect of guanethidine and similarly acting compounds. 3. *Use in Pregnancy:* Safe use during pregnancy and lactation has not been established. 4. *Use in Children:* Norpramin® (desipramine hydrochloride) is not recommended for use in children. 5. This drug may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks such as driving a car or operating machinery. Therefore, the patient should be cautioned accordingly.

Precautions: This drug should be dispensed in the least possible quantities to depressed outpatients, since suicide has been accomplished with drugs of this class. It should be kept out of reach of children. Reduce dosage, or alter treatment, if serious adverse effects occur. Norpramin® (desipramine hydrochloride) therapy in patients with manic-depressive illness may induce a hypomanic state after the depressive phase terminates and may cause exacerbation of psychosis in schizophrenic patients. Close supervision an careful adjustment of dosage are required wh this drug is given along with anticholinergic sympathomimetic drugs. While taking this drug, response to alcoholic beverages may be exaggerated. There is limited clinical experience in th concurrent administration of ECT and antid pressant drugs; thus, one should consider t possibility of increased risk relative to benefits. Discontinue as soon as possible prior to elective surgery because of possible cardiovascular effects. Hypertensive episodes have bee observed during surgery in patients on desipra mine hydrochloride. Leukocyte and differential counts should be performed in any patient who develops fever and sore throat during therap the drug should be discontinued if there is ne tropenia.

Adverse Reactions: *Cardiovascular:* hypotension, hypertension, tachycardia, palpitation, arrhythmias, heart block, myocardial infarction, stroke. *Psychiatric:* confusional states (especially



Coping with Depression

The ability to cope with depressive illness, for the patient and to some degree for the physician, largely depends on hope—a crutch that is usually lacking in the depressed patient. To the depressed patient all the good things of life are bleak, black, or unattainable; all that is bad has been happening or will happen. Helping such a patient to cope with life again, to overcome the incapacitating moods, outlooks, and fears which characterize depression, can be a most rewarding experience for the physician.

Although Norpramin® (desipramine hydrochloride) is relatively rapid-acting, the patient should be told that he will not feel better immediately but that he will gradually become his old self again. A minor tranquilizer in appropriate dosage may be used with Norpramin temporarily if anxiety due to depression is present; a phenothiazine may be used similarly if agitation is severe.

Frequently, Norpramin and your own understanding of the patient are all that is necessary.

Norpramin®
(desipramine hydrochloride)
helps the depressed cope with life again.

in the elderly), hallucinations, disorientation, delusions; anxiety, agitation; insomnia and nightmares; hypomania; exacerbation of psychosis. *Neurological:* paresthesias of extremities; incoordination, ataxia, tremors, peripheral neuropathy; extrapyramidal symptoms; seizures; alteration in EEG patterns; tinnitus. *Anticholinergic:* dry mouth, and rarely associated sublingual adenitis; blurred vision, disturbance of accommodation, mydriasis; constipation, paralytic ileus; urinary retention, delayed micturition, hypotonic bladder. *Allergic:* skin rash, petechiae, urticaria, itching, photosensitization, edema (of face and tongue or general), drug fever. *Hematologic:* agranulocytosis, eosinophilia, purpura, thrombocytopenia. *Gastrointestinal:* anorexia, nausea and vomiting, epigastric distress, peculiar taste, abdominal cramps, diarrhea, stomatitis, black tongue. *Endocrine:* gynecomastia; breast enlargement and galactorrhea in the female; increased or decreased libido, impotence, testicular swelling; elevation or depression of blood sugar levels. *Other:* jaundice (simulating obstructive), altered liver function; weight gain or loss; perspiration, flushing; urinary frequency, nocturia; parotid swelling; drowsiness, dizziness, weakness and fatigue, headache; alopecia. *Withdrawal Symptoms:* Though not indicative of addiction, abrupt cessation after prolonged therapy may produce nausea, headache and malaise.

Dosage and Administration: *The usual adult dose:* 50 mg. three times daily; increase if necessary after 7 to 10 days to maximum of 200 mg. daily. Dosages above 200 mg. per day are not recommended. *Maintenance:* At a lower dose adequate to maintain remission. *Adolescent and geriatric patient dose:* 25 to 50 mg. daily if necessary.

Overdosage: There is no specific antidote for desipramine, nor are there specific phenomena of diagnostic value characterizing poisoning by the drug. The principles of management of coma and shock by means of the mechanical respirator, cardiac pacemaker, monitoring of central venous pressure and regulation of fluid- and acid-base balance are well known in most medical centers. If heart failure is imminent, digitalize promptly.

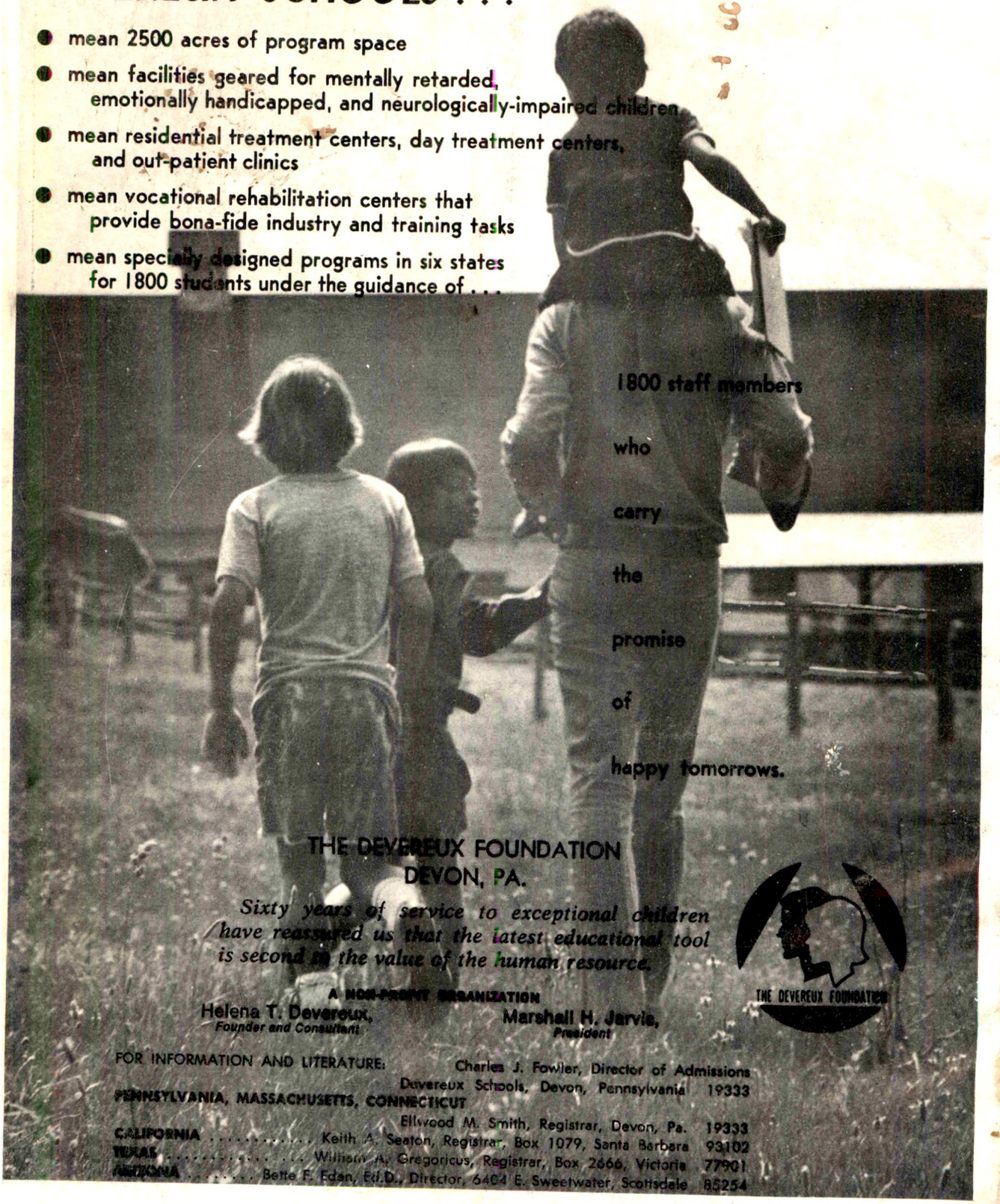
How Supplied: Norpramin® (desipramine hydrochloride) *25 mg.*, sugar coated tablets, yellow, in bottles of 50, 500 and 1000 tablets. Norpramin® (desipramine hydrochloride) *50 mg.*, sugar coated tablets, light green, in bottles of 50, 250 and 1000 tablets.

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Division of Colgate-Palmolive Company

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Helena T. Devereux, *Founder and Consultant*

Marshall H. Jarvie, *President*

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